

DSMIElectronics SA



ELITALIA

tel. 02.33.61.16.26 www.elitaliaweb.it
fax 02.26.26.10.09 info@elitaliaweb.it

IC Sockets

PCB Connectors

Interconnect Components

PREFACE

Although founded in 2003, DSMI ELECTRONICS SA inherits more than 29 years of proven experience and ability in the manufacturing of IC Sockets and various assemblies.

Previously known as Electronics SA Isérables and more recently as DSMI Electronics SA Isérables , we are situated at the height of 1000m in the village of Isérables in the Swiss Alps. Our unique location allows DSMI Electronics SA to operate highly efficiently with a loyal, experienced and flexible team.

At DSMI Electronics SA, we listen and respond to our customer's needs. We supply high quality Swiss products to a worldwide customer base who benefits from competitive prices and short lead times.

DSMI Electronics SA's specialities are the following:

- ☐ IC Sockets manufacturing
- ☐ Development of bespoke products
- ☐ Coaxial connectors and cable assembly
- ☐ Assembly subcontracting

For our other products or if you need further information, please [contact](#) the Customer Service.



NOTES:

- The drawings are not to scale
- All dimensions in this catalog are in millimeters
- All right reserved, ©DSMI ELECTRONICS SA Isérables, juin 2003
- DSMI reserves the right to change any information provided in this catalog without notification



RoHS Directive Products



All our products are available as RoHS compliant and compatible :

☐ RoHS compliant: With a standard insulator resisting to a soldering heat of 260°C for 5 seconds (economical version).

☐ RoHS compatible: With a high temperature insulator resisting to 280°C for 10 seconds (or 260°C for 20 sec) according to the JEDEC directive J-STD-020C.

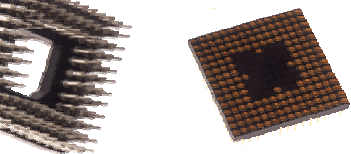
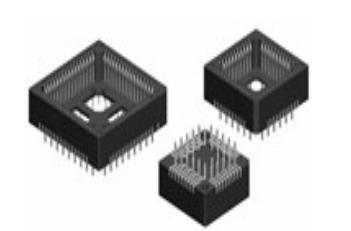
The actual tin plating process is approved. Other platings are available upon request and gold plated contacts can still be ordered.

Our products do not contain any of the other substances banned by the RoHS directive.

Our part numbers have been modified following the needed plating. You will find more details in this catalog.

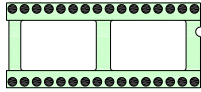
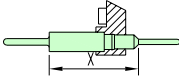
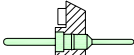
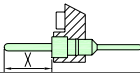
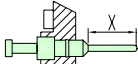
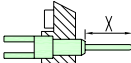
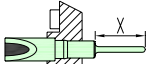
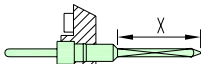
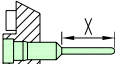
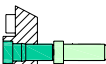
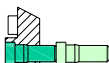
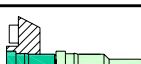
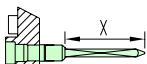
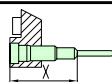
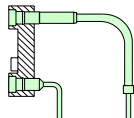
Upon request you can still get non-RoHS items.

For further information, please contact our Customer Service.

DIP	 ORDER FORM PAGE 6	Pages 4-5	
SIP Mating pin standard 0.47mm	 ORDER FORM PAGE 28	Page 25	Sockets 2.54mm pitch
		Page 26	Headers 2.54mm pitch
		Page 27	1.778mm / 1.8mm / 2mm / 1.27mm / 1mm pitch
PCB Mating pin standard 0.76mm	 ORDER FORM PAGE 59	Page 58	
PGA / BGA	 ORDER FORM 700,701: PAGE 73 703,705: PAGE 77 704,706,707,709: PAGE 81	Page 68	
CLIP		Page 82	
SPRING LOADED		Page 83	
PLCC		Pages 84-85	

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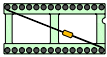
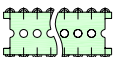
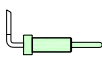
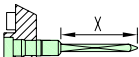
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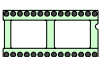
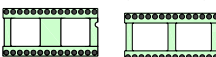
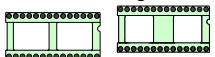
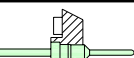
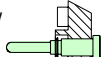
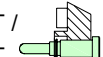
SERIES		610 / 630 / 640 / 650 / 911 2.54mm pitch / Mating pin 0.47 / (0.76)	102 / 300 / 400 2.54mm pitch / Closed frame
SP			
HEADERS	PB		14-15
	MC		14-15
	TT / TU		14-15
	TC / WT / WU		14-15
	TC.SMV Surface mount		14-15
	FF / JJ / KK		14-15
	XX / LL / MM		14-15
	RR / SS		14-15
SOCKETS	CC		7
	CJ / CM		7
	CN.SWT / CN.SWU Carrier		22
	CC.CKWT Carrier		21
	CC.CCWT Carrier		21
	CC.CK Carrier		21
	CC.CC Carrier		21
	LV		8
	AA / AB / BA / BB		10
	LC		9
	CLR / CLR1		13
	CCPF1 / CCPF2		Upon request

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DIP

SERIES		619 / 639 / 649 2.54mm pitch / Integral decoupling capacitor	900 / 960 2.54mm pitch / Carrier 2.54
SOCKETS	SP		
	CC		17
	CC Carrier		23
	CK Carrier		23
	CCWT Carrier		23
	CKWT Carrier		23
AB / BB / AA / BA			17

SERIES		6100 / 6300 / 6301 2.54mm pitch Automatic assembly	510 / 530 / 540 2.54mm pitch Solder tail Ultra low profile	1102 / 5102 / 3300 / 4400 2.54mm pitch SM / Floating mating	1112 / 5112 / 3330 / 4440 2.54mm pitch SM / Gull wing	720 / 721 / 722 / 723 / 7212 1.78mm pitch
HEADERS	SP					
	MC / MCS		12			
	ML / PML				20	
	TUST / PTUST / BTUST floating			19		
	PMHST / PPMHST / BPMHST floating			19		
	PMHSST / PPMHSST / BPMHSST floating			19		
SOCKETS	SD					24
	CL / PCL				20	
	CCST / PCCST / BCCST floating			18		
	LT		12			
	NC		11			

Standard DIP

610 . NP . SP . F . 0 . LP

Serie.
For insulator without center bar
replace 0 by 1 at the serie n° end.

.	Standard
A	Automatic (Only with pin CC)
H	High temperature insulator
HA	High temperature Automatic ass.

Number of pins

Type of contacts

. = standard

For pitch x2, x3, x4, or other pitch:

Example: 610.20.CC3F.0 (2.54X3=7.62)

Length code

(only for series for those is needed)

Clip plating option

.	Clip standard on catalog page
A	SC4
B	SC6.VLI
C	SC6.065
?	Etc.

Pin plating option

Custom DIP

610 . NP / 16 . SP . F . 0 . LP

Series
For insulator without center bar
replace 0 by 1 at the serie n°

.	Standard
A	Automatic (Only with pin CC)
H	High temperature
HA	High temperature Automatic

Number of pins

/ = first version, B, C, ... next versions

Number of positions

Type of contacts

Length code

(only for series for those is needed)

Clip plating option

.	Clip standard on catalog page
A	SC4
B	SC6.VLI
?	Etc.

Pin plating option

. = standard

For pitch x2, x3, x4, or other pitch:

Example: 610.20/16.CC2F.0 (2.54X2=5.08)

To order a special DIP

Customer			
Address			
ZIP		City	
Country			
Phone			
Fax			
E-mail			

DIP

Series	
Type of construction	
Number of pins	
Number of positions	
Type of contact (can be yours)	
Pin plating option	
Type of clip (can be yours)	
Clip plating option	
Length code (if requested)	

Fill in the holes where you want the contacts. If your request isn't standard, please send us a detailed drawing. For the very specific design, insulator is made in Epoxy.



SERIES 610,630,640,650,911

DIP 2.54mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / 0.76 / Open frame precision

			Pin style	CC / CJ / CM
			Plating sleeve (pin)	5.0µm Tin
			Plating contact (clip)	Au 24c flash
A	B	C	NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08	10	650.10.SP.F.0
NP/2 x 2.54	10.1	7.62	04 06 08 10 12 14 16 18* 20* 22* 24* 28*	610.NP.SP.F.0
NP/2 x 2.54	12.6	10.16	20* 22* 24* 28* 32*	640.NP.SP.F.0
NP/2 x 2.54	17.7	15.24	10 24* 28* 32* 36* 40* 42* 48* 50* 52*	630.NP.SP.F.0
NP/2 x 2.54	25.3	22.86	50 52 64	911.NP.SP.F.0
* For insulator without center bar replace 0 by 1 at the serie N° end. Example: 611.20.CC.F.0				

CC / CJ / CM			
SP	CC	CJ	CM
PIN LENGTH X	2.9mm	4.1mm	7mm

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 630H28.CC.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000) Soft brass pin (order with A -Automatic version- instead of the mark or after H) Example: 630HA40.CC.F.0
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI, add letter B after F instead of the mark.

Examples: 630.28.CC.FB0 or 630H28.CJ.FB0

Other mating pin available upon request

To order with inner spring type SC6.065 (insertion Ø0.65-0.85), add letter C after F instead of the mark.

Example: 630.40.CC.FC0

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min

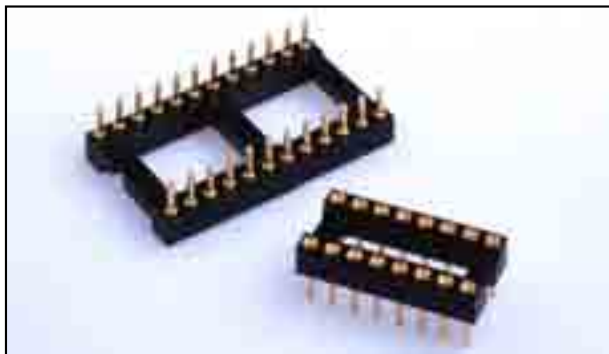
PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

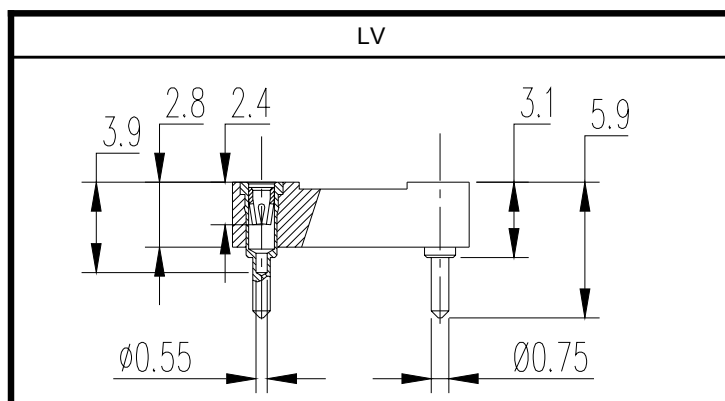
- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS



SERIES 610,630,640,650,911

DIP 2.54mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / Very low profile

			Pin style	LV
			Plating sleeve (pin)	5.0µm Tin
			Plating contact (clip)	Au 24c flash
A	B	C	NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08	10	650.10.LV.F.0
NP/2 x 2.54	10.1	7.62	04 06 08 10 12 14 16 18 20 22 24 28	610.NP.LV.F.0
NP/2 x 2.54	12.6	10.16	20 22 24 28 32	640.NP.LV.F.0
NP/2 x 2.54	17.7	15.24	10 24 28 32 36 40 42 48 50 52	630.NP.LV.F.0
NP/2 x 2.54	25.3	22.86	50 52 64	911.NP.LV.F.0



TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 630H28.LV.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI, add letter B after F instead of the mark.

Example: 630.28.LV.FB0

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 610,630,640,650,911

DIP 2.54mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / Open frame precision /
Elevated pin

			Pin style	LC
			Plating sleeve (pin)	5.0µm Tin
			Plating contact (clip)	Au 24c flash
A	B	C	NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08	10	650.10.LC.F.0.LP
NP/2 x 2.54	10.1	7.62	04 06 08 10 12 14 16 18 20 22 24 28	610.NP.LC.F.0.LP
NP/2 x 2.54	12.6	10.16	20 22 24 28 32	640.NP.LC.F.0.LP
NP/2 x 2.54	17.7	15.24	10 24 28 32 36 40 42 48 50 52	630.NP.LC.F.0.LP
NP/2 x 2.54	25.3	22.86	50 52 64	911.NP.LC.F.0.LP

LP PIN LENGTH X (in mm) Other pin length X upon request					
5.6	6.0	7.0	8.0	9.0	10.2
12.0	13.5	15.1	16.3	18.0	22.0
29.0	33.0	35.0			

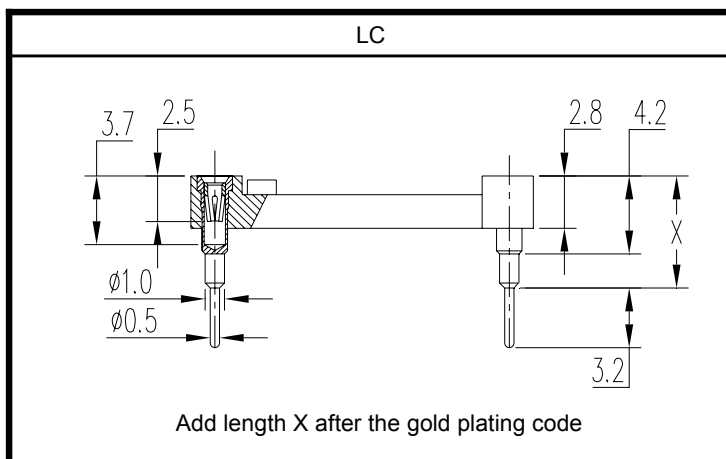
PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS



TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 630H28.LC.F.0.8.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

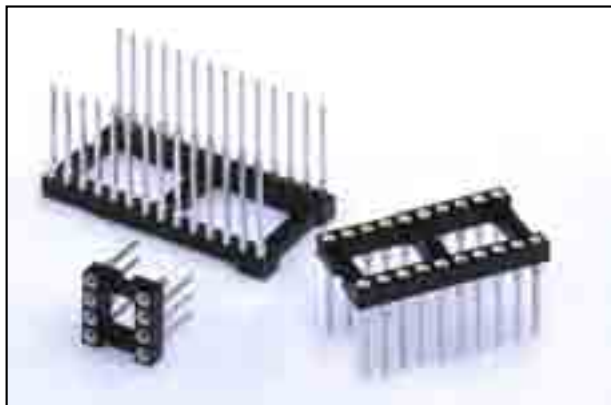
Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI, add letter B after F instead of the mark.

Example: 630.28.LC.FB0.6.0

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 610,630,640,650,911

DIP 2.54mm pitch / Sockets / Wire-wrap /
Mating pin 0.47mm / Open frame precision

			Pin style	AB / BB / AA / BA
			Plating sleeve (pin)	5.0µm Tin
			Plating contact (clip)	Au 24c flash
A	B	C	NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08	10	650.10.SP.F.0
NP/2 x 2.54	10.1	7.62	04 06 08 10 12 14 16 18 20 22 24 28	610.NP.SP.F.0
NP/2 x 2.54	12.6	10.16	20 22 24 28 32	640.NP.SP.F.0
NP/2 x 2.54	17.7	15.24	10 24 28 32 36 40 42 48 50 52	630.NP.SP.F.0
NP/2 x 2.54	25.3	22.86	50 52 64	911.NP.SP.F.0

AB / BB / AA / BA				
SP	AB	BB	AA	BA
PIN LENGTH X	6.6mm	9.4mm	12.95mm	16.0mm

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 630H28.BB.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

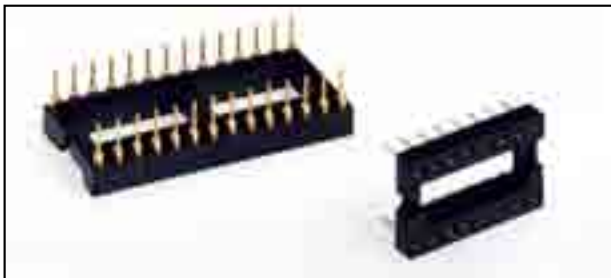
Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI, add letter B after F instead of the mark.

Examples: 630.28.AB.FB0 or 630H28.BB.FB0

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



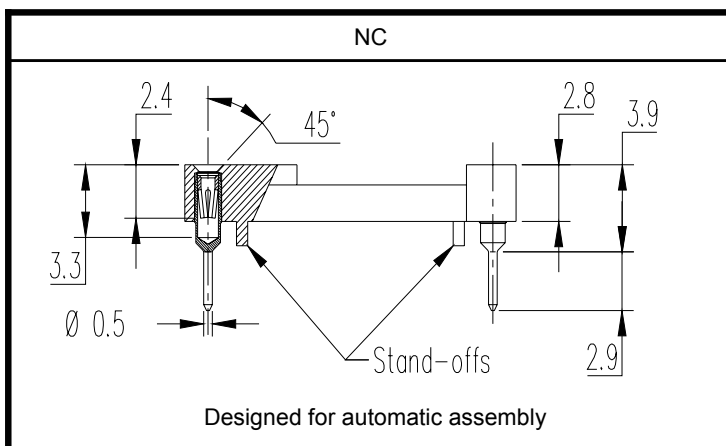
SERIES 6100,6300,6301

DIP 2.54mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / Open frame precision /
Automatic assembly

			Pin style	NC
			Plating sleeve (pin)	5.0µm Tin
			Plating contact (clip)	Au 24c flash
A	B	C	NP Nbr PIN	ORDERING NUMBERS
NP/2 x 2.54	10.1	7.62	14 16 18 20 24	6100.NP.NC.F.0
NP/2 x 2.54	17.7	15.24	24 28 40	6300.NP.NC.F.0

Without center bar			Pin style	NC
			Plating Sleeve (pin)	5.0µm Tin
			Plating contact (clip)	Au 24c flash
A	B	C	NP Nbr PIN	ORDERING NUMBERS
NP/2 x 2.54	17.7	15.24	24 28 40	6301.NP.NC.F.0

To order without stand-off, add the suffix WST after the gold plating code.
Example: 6300.28.NC.D.0WST



TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 Zytel = standard PCT = high temperature (order with H) Please contact us for availability Example: 6300H28.NC.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI, add letter B after F instead of the mark.

Example: 6300.28.NC.FB0

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

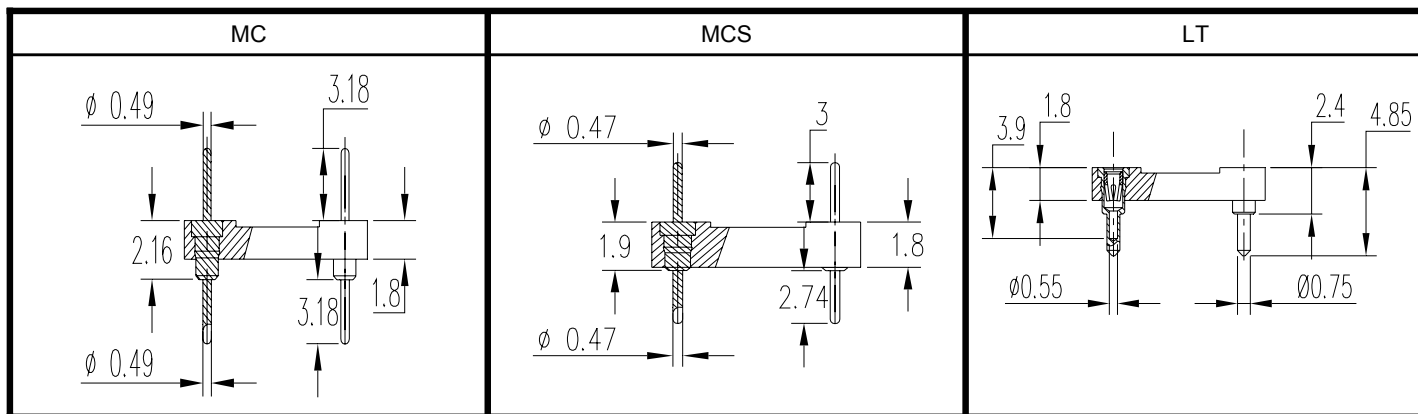
- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

SERIES 510,530,540

DIP 2.54mm pitch / Sockets and Headers /
Solder tail / Mating pin 0.47mm / Ultra low profile



			Pin style	MC / MCS / LT
			Plating sleeve (pin)	5.0µm Tin
			Plating contact (clip)	Au 24c flash
A	B	C	NP Nbr PIN	ORDERING NUMBERS
NP/2 x 2.54	10.1	7.62	06 08 10 14 16 18 20 22 24 28	510.NP.SP.F.0
NP/2 x 2.54	12.6	10.16	20 22 24 28	540.NP.SP.F.0
NP/2 x 2.54	17.7	15.24	24 28 32 36 40 48 50	530.NP.SP.F.0
* Other pin options can be fitted to the ultra low plastic insulator body. Send your exact technical requirement to the factory with a drawing and quantities.				



TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 530H28.LT.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4.SH		SC4	
Insertion	350g max.	Insertion	320g max.
Extraction	100g min.	Extraction	50g min.

To order with inner spring type SC4, add letter A after F instead of the mark.
Example: 510.28.LT.FA0

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

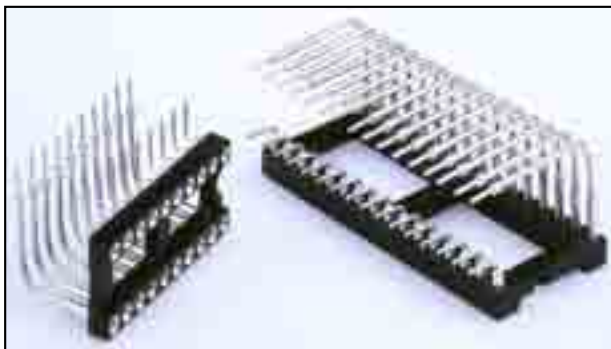
- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

ELECTRICAL DATA

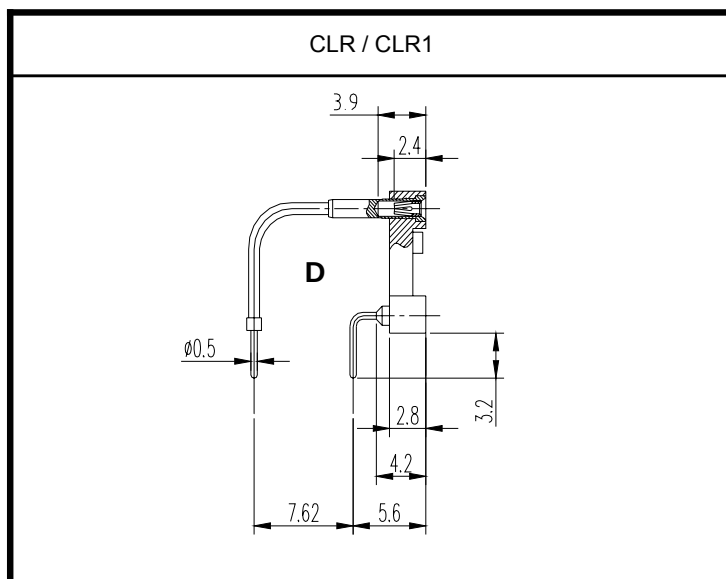
Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 610,630,640,650

DIP 2.54mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / Right angle / Opened

				Pin style	CLR / CLR1
				Plating sleeve (pin)	5.0µm Tin
				Plating contact (clip)	Au 24c flash
A	B	C	D	NP Nbr PIN	ORDERING NUMBERS
NP/2 x 2.54	7.6	5.08	CLR = 5.08	10	650.10.CLR.F.0
NP/2 x 2.54	10.1	7.62	CLR = 7.62 CLR1 = 2.54	04 06 08 10 14 16 18 20 22 24 28	610.NP.SP.F.0
NP/2 x 2.54	12.6	10.16	CLR = 7.62	22 24 28 32	640.NP.CLR.F.0
NP/2 x 2.54	17.7	15.24	CLR = 7.62	16 24 28 32 36 40 42 48 50 52	630.NP.CLR.F.0



TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 630H28.CLR.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI, add letter B after F instead of the mark.

Example: 630.28.CLR.FB0

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

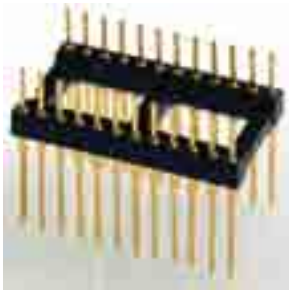
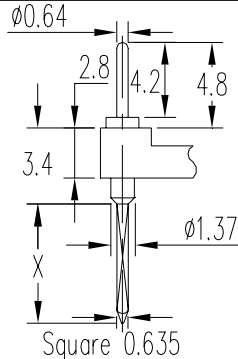
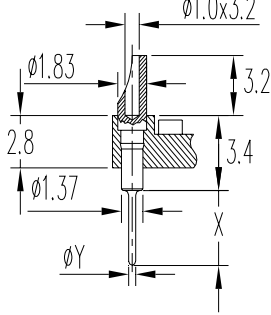
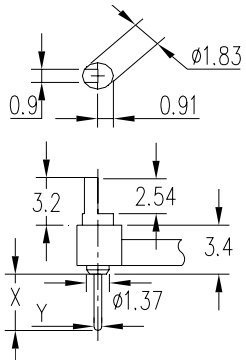
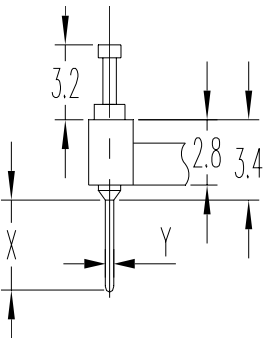
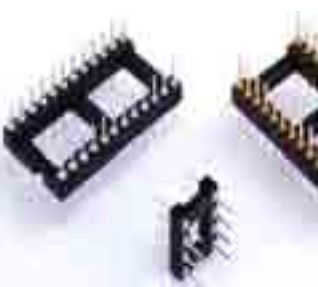
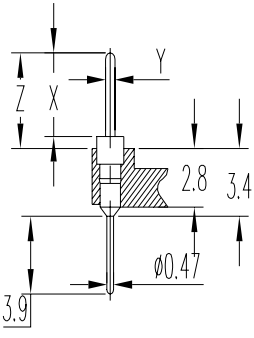
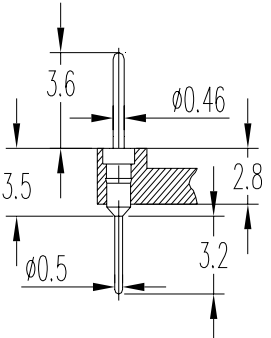
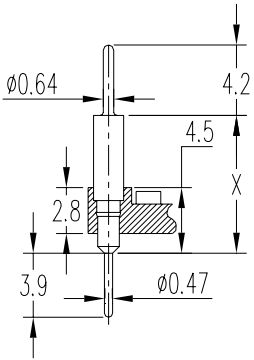
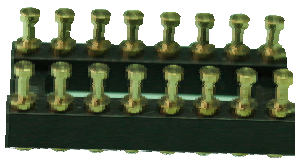
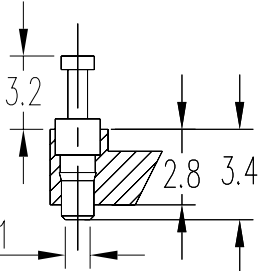
ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min

SERIES 610,630,640,650,911

DIP 2.54mm pitch / Headers / Solder tail /

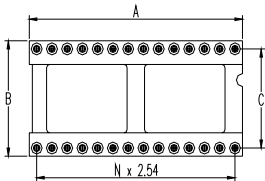
Connecting pin 0.47mm / Open frame precision

RR / SS		XX / LL / MM	
			
FF / JJ / KK		TC / WT / WU	
			
TT / TU		MC	
			
PB		TC.SMV (Surface mount)	
			

SERIES 610,630,640,650,911

DIP 2.54mm pitch / Headers / Solder tail /

Connecting pin 0.47mm / Open frame precision

			Pin style	RR / SS / XX / LL / MM / FF / JJ / KK / TC / WT / WU / TT / TU / MC / PB / TC.SMV
			Plating sleeve (pin)	5.0µm Tin
A	B	C	NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08	10	650.10.SP.F
NP/2 x 2.54	10.1	7.62	04 06 08 10 14 16 18 20 22 24	610.NP.SP.F
NP/2 x 2.54	12.6	10.16	22 24 28 32	640.NP.SP.F
NP/2 x 2.54	17.7	15.24	10 24 28 32 36 40 42 48 50 52	630.NP.SP.F
NP/2 x 2.54	25.3	22.86	50 52 64	911.NP.SP.F

mm SP \	X	Y	Z
RR	12.95	-	-
SS	9.4	-	-
XX Solder cup strip	3.9	Ø 0.5	-
LL Solder cup strip	12.95	Sq 0.635	-
MM Solder cup strip	9.4	Sq 0.635	-
FF Slotted head strip	3.9	Ø 0.5	-
JJ Slotted head strip	12.95	Sq 0.635	-
KK Slotted head strip	9.4	Sq 0.635	-
TC Turred head strip	3.9	Ø 0.5	-
WT Turred head strip	12.95	Sq 0.635	-
WU Turred head strip	9.4	Sq 0.635	-
TT	4.2	Ø 0.64	4.8
TU	3.7	Ø 0.5	4.3
PB Piggy-back	6.4 / 8.4 / 15.4 / 21.2 / 27.4	-	-

* This page describes the standards available.

If you wish other dimensions please contact the factory or submit your technical data.

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS
- .S 0.25µm gold plating (connecting side)
5µm tin (PCB side)
- .S only available for MC style

TECHNICAL DATA

Temperature range

-55°C to +125°C

Insulator body

Glass filled thermoplastic polyester,
self-extinguishing, rated UL94V-0

PCB = standard

PCT = high temperature (order with H)

Example: 630H28.TT.F

Outer shell (sleeve)

Screw machined Brass CuZn36Pb3
(C36000)

To order the Piggy-back, change LP by length X.

Example: 630.32.PB.F.15.4

ELECTRICAL DATA

Rated current

1A

Maxi working voltage

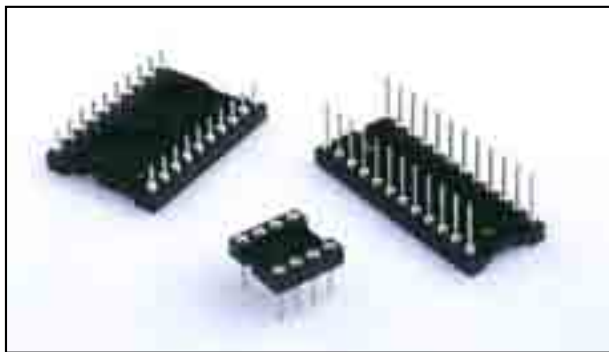
100V_{RMS} / 150 V_{dc}

Contact resistance

10 mΩ max

Dielectric strength

1000 V_{RMS} min



SERIES 102,300,400

DIP 2.54mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / 0.76 /
Closed frame precision

			Pin style	
			Plating sleeve (pin)	5.0µm Tin
			Plating contact (clip)	Au 24c flash
A	B	C	NP Nbr PIN	ORDERING NUMBERS
NP/2 x 2.54	10.1	7.62	04 06 08 10 12 14 16 18 20 22 24	102. NP.SP.F.0
NP/2 x 2.54	12.6	10.16	22 24 (*1)	400. NP.SP.F.0
NP/2 x 2.54	17.7	15.24	24 28 32 36 40 48 (*1)	300. NP.SP.F.0
*1) Availability from 4 positions				

All the open versions can be ordered in closed ones by changing the serie code.

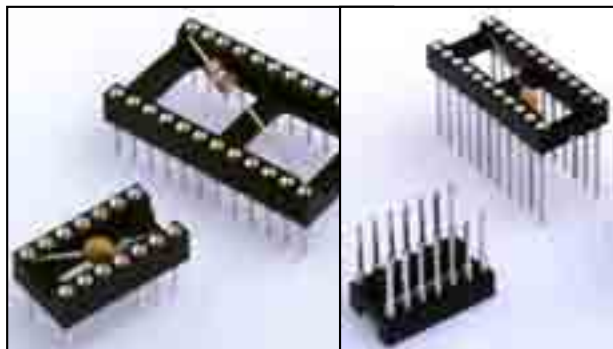
TO ORDER CLOSED DIP

Replace 610 by 102
630 by 300
640 by 400

Examples:

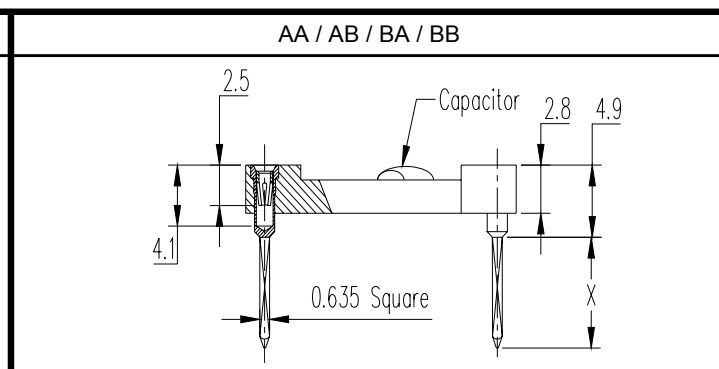
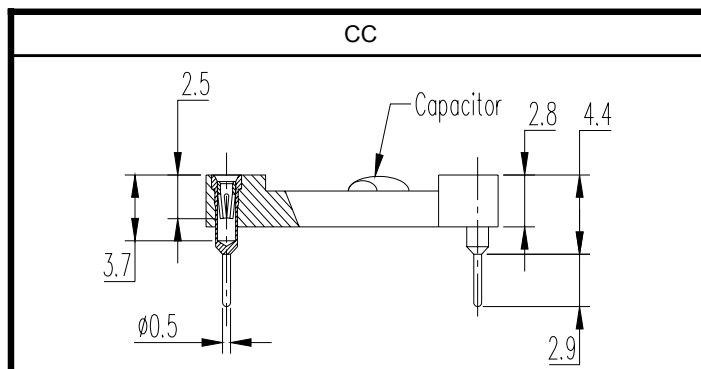
630.40.CC.F.0	300.40.CC.F.0
610.10.TT.F	102.10.TT.F
640.22.CC.C.4	400.22.CC.C.4
630.28.CLR.F.1	300.28.CLR.F.1
610.20.LC.F.0.6.0	102.20.LC.F.0.6.0
640.24.FF.C	400.24.FF.C
610.04.AA.F.0	102.04.AA.F.0
etc.	

All pin styles are available for both open and closed versions.



SERIES 619,639,649

DIP 2.54mm pitch / Sockets / Solder tail /
Wire-wrap / Mating pin 0.47mm /
Integral decoupling capacitor



			Pin style	CC / AB / BB / AA / BA
			Plating sleeve (pin)	5.0µm Tin
			Plating contact (clip)	Au 24c flash
A	B	C	NP Nbr PIN	ORDERING NUMBERS
NP/2 x 2.54	10.1	7.62	14 16 18 20 22 24	619.NP.SP.F.0
27.8	12.6	10.16	22	649.22.SP.F.0
NP/2 x 2.54	17.7	15.24	24 28 40	639.NP.SP.F.0

SP	CC	AA	AB	BA	BB
PIN LENGTH X	2.9mm	12.95mm	6.6mm	16.0mm	9.4mm

TECHNICAL DATA

Temperature range	-25°C to +85°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 639H28.CC.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4

Insertion	320g max.
Extraction	50g min.

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

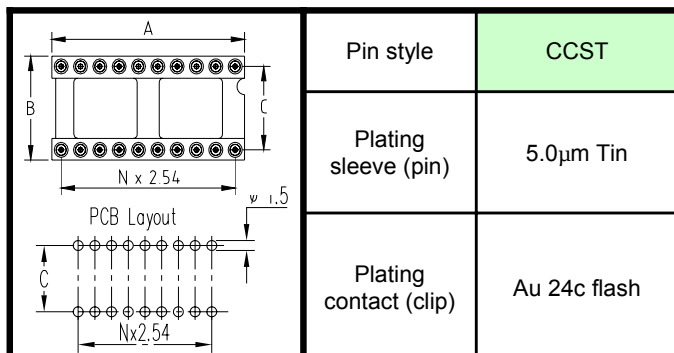
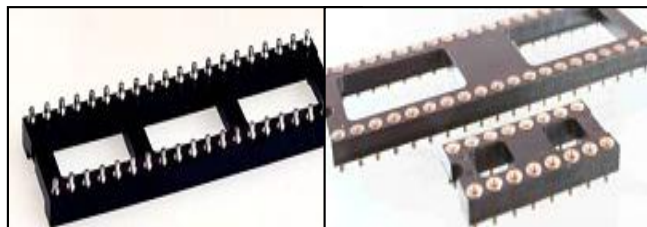
- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

ELECTRICAL DATA

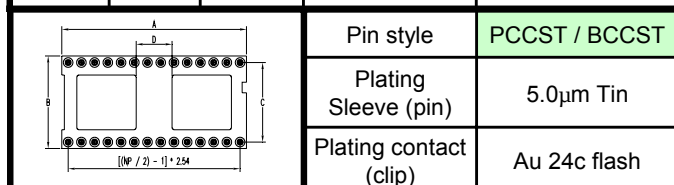
Capacitor value	0.1µF (another value upon request)
Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min

SERIES 1102,5102,3300,4400

DIP 2.54mm pitch / Sockets / Floating pin /
Mating pin 0.47mm / Pick & place / Surface mount



A	B	C	NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08	10	5102H10.SP.F.0
NP/2 x 2.54	10.1	7.62	04 06 08 10 14 16 18 20 22 24 28	1102HNP.SP.F.0
NP/2 x 2.54	12.6	10.16	22 24 28 32	4400HNP.SP.F.0
NP/2 x 2.54	17.7	15.24	24 28 32 36 40 42 48	3300HNP.SP.F.0



A	B	C	NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08	10	5102H10.SP.F.0
NP/2 x 2.54	10.1	7.62	*04 *06 *08 *10 *14 *16 *18 *20 *22 *24 *28	1102HNP.SP.F.0
NP/2 x 2.54	12.6	10.16	22 24 28 32	4400HNP.SP.F.0
NP/2 x 2.54	17.7	15.24	24 *28 *32 36 *40 *42 48	3300HNP.SP.F.0

Actually only * positions are available on stock. For other versions, contact the customer service.

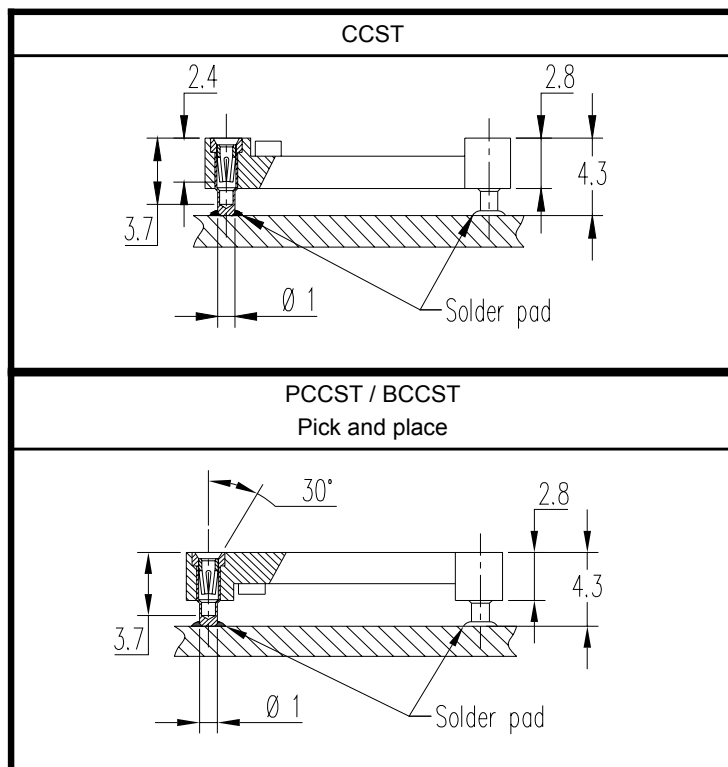
PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS



TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4

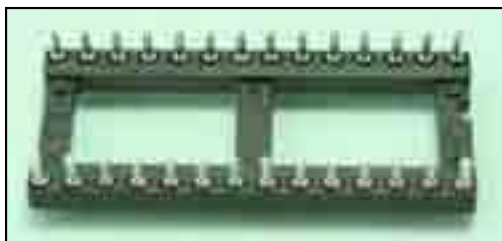
Insertion	320g max.
Extraction	50g min.

For socket pick and place

PCCST	with standard packaging tube
BCCST	with tape & reel packaging
Examples:	1102H28.PCCST.F.0 (tube) 1102H28.BCCST.F.0 (blister)

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 1102,5102,3300,4400

DIP 2.54mm pitch / Headers / Floating pin /
Mating pin 0.47mm / Pick & place / Surface mount

			Pin style	TUST / PMHST / PMHSST
			Plating sleeve (pin)	5.0µm Tin
A	B	C	NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08	10	5102H10.SP.F.0
NP/2 x 2.54	10.1	7.62	04 06 08 10 14 16 18 20 22 24 28	1102HNP.SP.F.0
NP/2 x 2.54	12.6	10.16	22 24 28 32	4400HNP.SP.F.0
NP/2 x 2.54	17.7	15.24	24 28 32 36 40 42 48	3300HNP.SP.F.0
			Pin style	PTUST / PPMHST / PPMHSST
			Plating Sleeve (pin)	5.0µm Tin
A	B	C	NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08	10	5102H10.SP.F.0
NP/2 x 2.54	10.1	7.62	*04 *06 *08 *10 *14 *16 *18 *20 *22 *24 *28	1102HNP.SP.F.0
NP/2 x 2.54	12.6	10.16	22 24 28 32	4400HNP.SP.F.0
NP/2 x 2.54	17.7	15.24	24 *28 *32 36 *40 *42 48	3300HNP.SP.F.0

Actually only * positions are available on stock. For other versions, contact the customer service.

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .D tin / lead non-RoHS

SP	TUST PTUST	PMHST PPMHST	PMHSST PPMHSST
PIN LENGTH X	3.6mm	5.0mm	3.6mm
PIN LENGTH Y	Ø 0.47mm	Ø 0.76mm	Ø 0.76mm

TUST / PMHST / PMHSST
PTUST / PPMHST / PPMHSST
Pick and place

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)

For socket pick and place

PTUST	with standard packaging tube
BTUST	with tape & reel packaging
Examples:	1102H28.PTUST.F.0 (tube) 1102H28.BTUST.F.0 (blister)

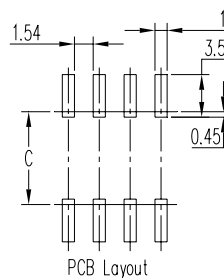
ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 1112,5112,3300,4400

DIP 2.54mm pitch / Sockets and Headers /
Gull wing / Mating pin 0.47mm / Pick & place /
Surface mount



				Pin style	CL / ML
				Plating sleeve (pin)	5.0µm Tin
				Plating contact (clip)	Au 24c flash
A	B	C		NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08		10	5112H10.SP.F.0
NP/2 x 2.54	10.1	7.62		04 06 08 10 14 16 18 20 22 24 28	1112HNP.SP.F.0
NP/2 x 2.54	12.6	10.16		22 24 28 32	4440HNP.SP.F.0
NP/2 x 2.54	17.7	15.24		24 28 32 36 40 42 48	3330HNP.SP.F.0
				Pin style	PCL / BCL / PML / BML
				Plating sleeve (pin)	5.0µm Tin
				Plating contact (clip)	Au 24c flash
A	B	C	D	NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08		10	5112H10.SP.F.0
NP/2 x 2.54	10.1	7.62	5.0 7.6 10.1 12.6 5.3 8.3	04 06* 08* 10* 14* 16* 18* 20* 22* 24* 28*	1112HNP.SP.F.0
NP/2 x 2.54	12.6	10.16	8.3 10	22 24 28 32	4440HNP.SP.F.0
NP/2 x 2.54	17.7	15.24	10	24 28* 32* 36 40* 42* 48	3330HNP.SP.F.0

Actually only * positions are available on stock. For other versions, contact the customer service.

PLATING OPTIONS

(only available for ML and PML type)

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .D tin / lead non-RoHS
- .S 0.25µm gold plating (connecting side)
5µm tin (PCB side)

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

CL	ML
PCL	PML
Pick and place	

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4

Insertion	320g max.
Extraction	50g min.

For insulator pick and place

PCL / PML with standard packaging tube

BCL / BML with tape & reel packaging

Examples: 1112H28.PCL.F.0 (tube)

1112H28.BCL.F.0 (blister)

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 610,630,640,650,911

DIP 2.54mm pitch / Sockets / Solder tail /

Mating pin 0.47mm / Plastic carrier

CC.CC	CC.CK	CC.CCWT	CC.CKWT

			Pin style	CC.CC / CC.CK / CC.CCWT / CC.CKWT
			Plating sleeve (pin)	5.0µm Tin
			Plating contact (clip)	Au 24c flash
A	B	C	NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08	10	650.10.SP.F.0
NP/2 x 2.54	10.1	7.62	04 06 08 10 12 14 16 18 20 22 24 28	610.NP.SP.F.0
NP/2 x 2.54	12.6	10.16	20 22 24 28 32	640.NP.SP.F.0
NP/2 x 2.54	17.7	15.24	10 24 28 32 36 40 42 48 50 52	630.NP.SP.F.0
NP/2 x 2.54	25.3	22.86	50 52 64	911.NP.SP.F.0

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range

-55°C to +125°C

Insulator body

Glass filled thermoplastic polyester,
self-extinguishing, rated UL94V-0

PCB = standard

PCT = high temperature (order with H)

Example: 630H28.CC.CK.F.0

Outer shell (sleeve)

Screw machined Brass CuZn36Pb3
(C36000)

Inner spring contact SC4

Stamped and formed BeCu (C17200)
gold or tin plated, accepts Ø0.40-0.56
or rectangular pin 0.25 x 0.45

Insertion / Extraction

Ø0.43 test pin

Other forces available upon request.

Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI, add letter B after F instead of the mark.

Examples:

630.28.CC.CC.FB0

630.28.CC.CK.FB0

630.28.CC.CCWT.FB0

630.28.CC.CKWT.FB0

ELECTRICAL DATA

Rated current

1A

Maxi working voltage

100V_{RMS} / 150 V_{dc}
Contact resistance

10 mΩ max

Dielectric strength

1000 V_{RMS} min

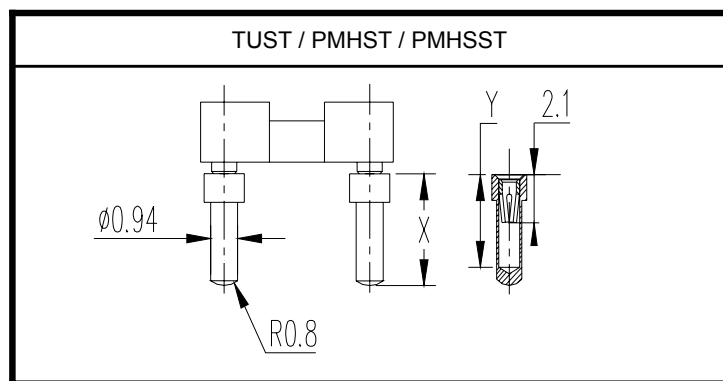


SERIES 610,630,640,650,911

DIP 2.54mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / Plastic carrier

			Pin style	CN.SWT / CN.SWU
			Plating sleeve (pin)	5.0µm Tin
			Plating contact (clip)	Au 24c flash
A	B	C	NP Nbr PIN	ORDERING NUMBERS
12.6	7.6	5.08	10	650.10.SP.F.0
NP/2 x 2.54	10.1	7.62	04 06 08 10 12 14 16 18 20 22 24 28	610.NP.SP.F.0
NP/2 x 2.54	12.6	10.16	20 22 24 28 32	640.NP.SP.F.0
NP/2 x 2.54	17.7	15.24	10 24 28 32 36 40 42 48 50 52	630.NP.SP.F.0
NP/2 x 2.54	25.3	22.86	50 52 64	911.NP.SP.F.0

SP	CN.SWT	CN.SWU
PIN LENGTH X	3.6mm	6.3mm
HOLE DEPTH Y	3.2mm	5.9mm



TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 630H28.CN.SWT.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC3	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.35-0.50
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC3	
Insertion	150g max.
Extraction	30g min.

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

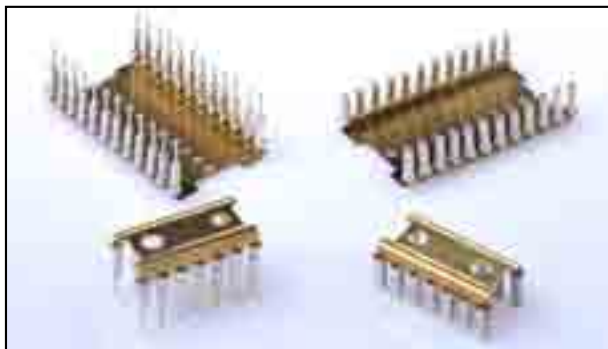
- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 900,960

DIP 2.54mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / Metal carrier

CC	CK	CCWT	CKWT

		Pin style	CC / CK / CCWT / CKWT
		Plating sleeve (pin)	5.0µm Tin
		Plating contact (clip)	Au 24c flash
A	C	NP Nbr PIN	ORDERING NUMBERS
NP/2 x 2.54	7.62	14 16 18 20 22 24 28 *1)	900.NP.SP.F.0
NP/2 x 2.54	15.24	22 24 28 32 *1)	960.NP.SP.F.0
*1) Other lengths available upon request. Please contact our customer service.			

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Carrier body	Brass
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

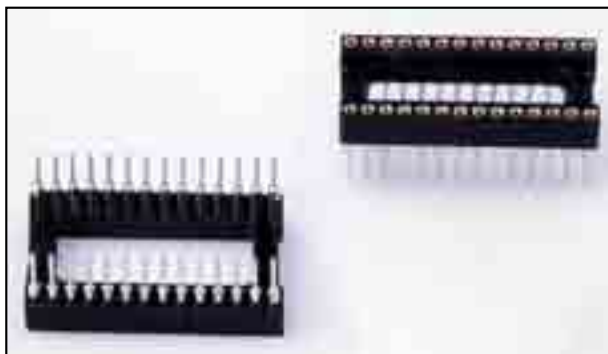
To order with inner spring type SC6.VLI, add letter B after F instead of the mark.

Examples:
960.28.CC.FB0
960.28.CK.FB0
960.28.CCWT.FB0
960.28.CKWT.FB0

ELECTRICAL DATA

(for Pin)

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



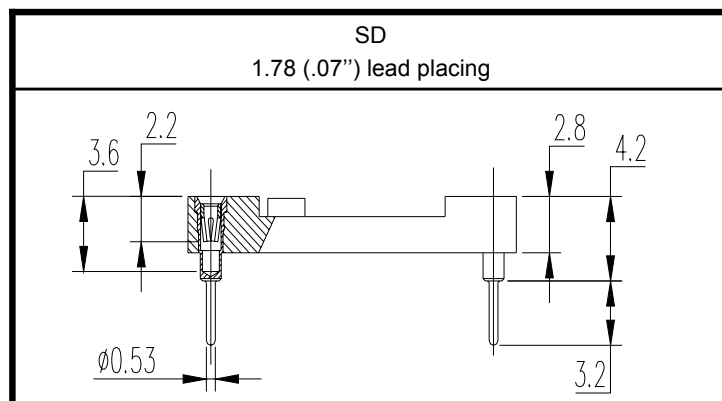
SERIES 720,721,722,723,7212

DIP 1.78mm pitch / Sockets /

Shrinkdip 1.78 spacing solder tail /

Mating pin 0.47mm

			Pin style	SD
			Plating sleeve (pin)	5.0µm Tin
			Plating contact (clip)	Au 24c flash
A	B	C	NP Nbr PIN	ORDERING NUMBERS
14.6	10.1	7.62	16	723H16.SD.F.0
NP/2 x 1.778	12.6	10.16	28 30 32 48	722HNP.SD.F.0
NP/2 x 1.778	17.7	15.24	20 24 28 40 42 48 52 56 64 68	721HNP.SD.F.0
57.2	21.45	19.05	64	7212H64.SD.F.0
CLOSED FRAME				
57.2	21.45	19.05	64	720H64.SD.F.0
• Options available upon request: 1) Surface mount shrinkdip with gull wing terminations Series 721HNP.CL.F.0 2) Shrinkdip pin header, solder tail Series 721HNP.MC.F.0				



TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature (order with H)
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin

Standard SC4

Insertion	320g max.
Extraction	50g min.

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

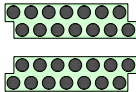
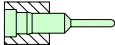
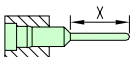
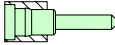
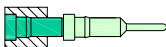
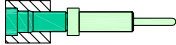
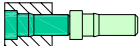
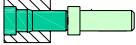
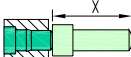
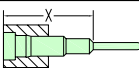
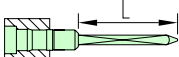
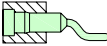
- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

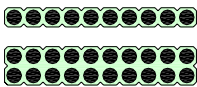
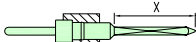
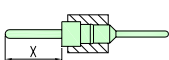
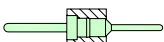
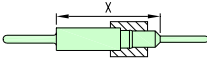
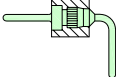
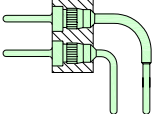
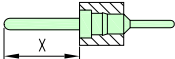
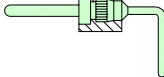
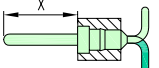
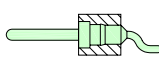
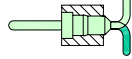
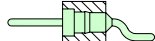
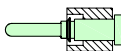
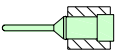
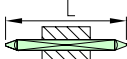
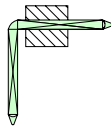
ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min

SERIES		2002 / 2022 2.54mm pitch / 5.08 / 7.62 or other on request	2022.ZZ 2.54mm pitch / Solder Zig-Zag	2502 2.54mm pitch / Ultra low profile
				
SOCKETS	SP 	30-31	40	
	CJ / CM 	30-31		
	LV 	30-31		
	CC.CC 	39		
	CC.CK 	39		
	CC.CCWT 	39		
	CC.CKWT 	39		
	CN.SWU / CN.SWT 	39		
	LC 	32		
	AB / BB / AA / BA 	30-31		
	CL 	30-31		
	CLS 	30-31		
	CC.SMV 	33		
	CCST floating 	33		
	CC.SMH 	33		
	LT 			41
	CCPF 	Upon request		

2/3

SIP

SP	SERIES	2002 / 2022 2.54mm pitch / 5.08 / 7.62 or other on request	2502 2.54mm pitch / Ultra low profile
			
HEADERS	RR / SS	 34-35	
	XX / LL / MM	 34-35	
	FF / JJ / KK	 34-35	
	TC / WT / WU	 34-35	
	TT / TU	 34-35	
	MC / MCS	 34-35 Only MC	41
	PB	 34-35	
	ML	 34-35	
	MLS	 34-35	
	PMH / PMHS PMH7 / PMHH	 36	
	PMH.F.L	 36	
	PMH.SMV / PMHS.SMV	 37	
	PMH.SMH / PMH.SMHP	 37	
	TU.SMV	 38	
	TU.SMH / TU.SMHP	 38	
	PMHST / PMHSST <i>floating</i>	 37	
	TUST <i>floating</i>	 38	
	SC	 55	
	SL	 56	

3/3

SIP

SP SERIES		2004 / 2044 2mm pitch	4002 / 4022 / 4042 / 4222 1.27mm pitch	2006 1mm pitch	2700 Shrinksip 1.778mm	2800 Shrinksip 1.8mm
SOCKETS	NC / NB		44			
	LV		44			
	SD				42	43
	LC				42	
	NDL		44			
	NDLS		44			
	ND.SMV		46			
	ND.SMH		46			
	FH.SMV			47		
	FH.SMH / FH.SMHS			49	54 Only FH.SMH	
	FH			50	54	
	FH.F.L			51		
HEADERS	MC				42	
	MD		45			
	MDL		45			
	MDLS		45			
	MD.SMV		46			
	MD.SMH		46			
	MH.SMV			48		
	MH.SMH / MH.SMHP / MH.SMHS			49	54 Only MH.SMH	
	MH			52	54	
	MH.C.L			53		
	SL / SO / SLS / SOS		57			
	SC / SB		57			

Standard SIP

2002

NP

SP

F

0

LP

Series.
For insulator without center bar
replace 0 by 1 at the serie n° end.

.	Standard
A	Automatic (Only with pin CC)
H	High temperature insulator
HA	High temperature Automatic ass.

Number of pins

Type of contacts

. = standard

For pitch x2, x3, x4, or other pitch:

Example: 2002H20.CL4F.0 (2.54X4=10.16)

Length code

(only for series for those is needed)

Clip plating option

.	Standard on catalog page
A	SC4
B	SC6.VLI
C	SC6.065
?	Etc.

Pin plating option

Available with Positioning options (see GUIDE AND PAD description page 29)

Custom SIP

2002

NP

/ 16

SP

F

0

LP

Series
For insulator without center bar
replace 0 by 1 at the serie n°

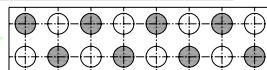
.	Standard
A	Automatic (Only with pin CC)
H	High temperature
HA	High temperature Automatic

Number of pins

/ = first version, B, C, ... next versions

Number of positions

2022.8/16.CC.F.0



Type of contacts

Length code

(only for series for those is needed)

Clip plating option

.	Standard on catalog page
A	SC4
B	SC6.VLI
?	Etc.

Pin plating option

. = standard

For pitch x2, x3, x4, or other pitch:

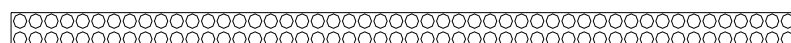
Example: 2002H20/16.LT2F.0 (2.54X2=5.08)

Available with Positioning options (see GUIDE AND PAD description page 29)

To order a special SIP

Customer			
Address			
ZIP		City	
Country			
Phone			
Fax			
E-mail			

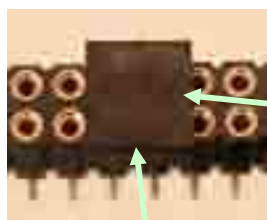
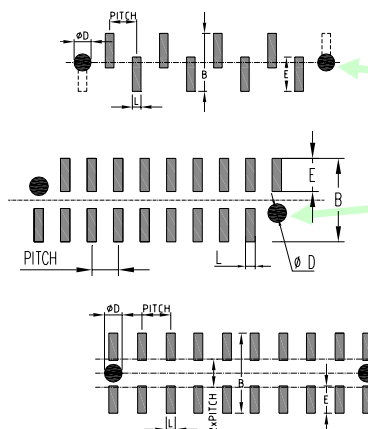
SIP



Series	
Type of construction	
Number of pins	
Number of positions	
Type of contact (can be yours)	
Pin plating option	
Type of clip (can be yours)	
Clip plating option	
Length code (if requested)	

Fill in the holes where you want the contacts. If your request isn't standard, please send us a detailed drawing. For the very specific design, insulator is made in Epoxy.

Guide and Pad option



Width

Length



PACKAGING OPTIONS

Box	Standard Example: 4002HNP.FH.SMV.F.0
Tape & Reel	Change the dash after NP into B Example: 4002HNPPBFH.SMV.F.0
Tube	Change the dash after NP into T Example: 4002HNPTFH.SMV.F.0
Tray	Change the dash after NP into R Example: 4002HNPRFH.SMV.F.0

Please consult customer service for availability

POSITIONING CONTACT

For single row, the first and the last pin are not bent (positioning guide) but counted as contacts.

Series 2001, 4001, 2002, 4002, etc

For double row, the first and the last pin are not bent (positioning guide) but counted as contacts.

Series 2011, 4011, 2022, 4022, etc

POSITIONING PIN

For double rows (2x pitch), the guides are not counted as contacts.

Guide Series 4042 in surface mount version.

Other series with these options upon request.

Add letter P before NP

Example: 4002HPNP.FH.SMV.F.0

POSITIONING PEGS

Available for serie 2001, version PFH.SMH

PICK & PLACE

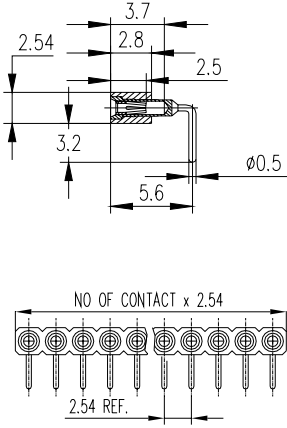
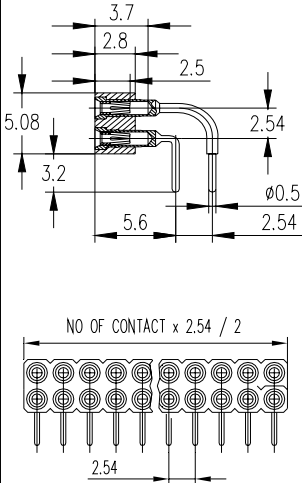
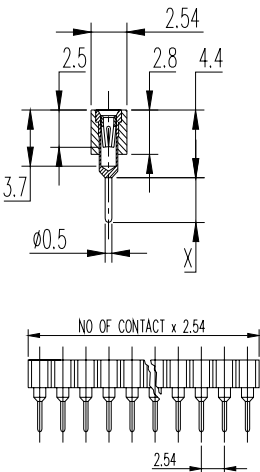
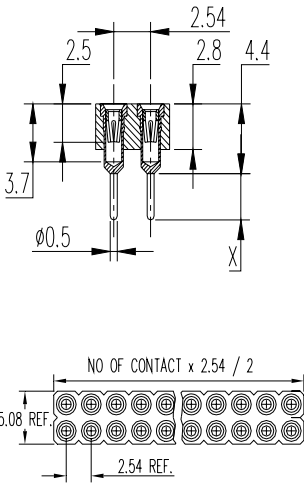
Pad	Place letter P between Np and B (or T or SP) Example: 4002HNPPBFH.SMV.F.0
-----	--

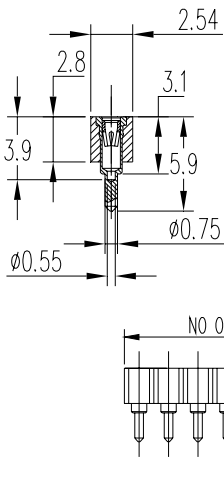
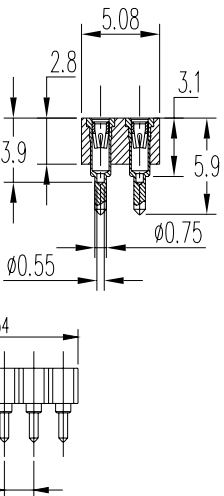
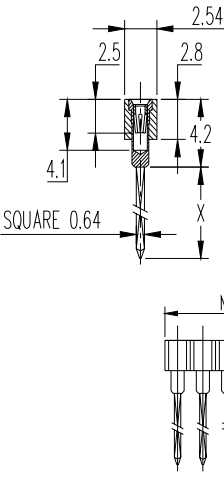
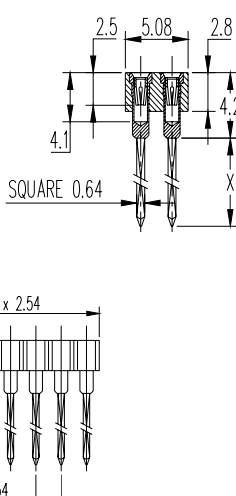
For pick and place function, a pad is added in the middle of the socket.

Dimensions	Length	Width
Serie 2001	6.5	5
	10	5
Serie 2011	6	6
Serie 4002	6.02	4.4
Serie 4022	7.97	4.4
Serie 4042	7.97	4.4

SERIES 2002,2022

SIP 2.54mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / Right angle / Breakable

CL		CLS		CC / CJ / CM				
2002		2022		2002		2022		
Mating pin 0.47mm				Mating pin stand 0.47mm / 0.76 (only straight version) SIP IC sockets				
								
				SP		CC	CJ	CM
				PIN LENGTH X		2.9mm	4.1mm	7mm

LV		AA / AB / BA / BB			
2002		2002		2022	
Very low profile SIP sockets		Wire-wrap			
					
					
		SP	AA	AB	BA
		PIN LENGTH X	12.95mm	6.6mm	16.0mm
				BB	9.4mm

SERIES 2002,2022

SIP 2.54mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / Breakable



Pin style		CC / CJ / CM / CL / CLS / LV / AA / AB / BA / BB
Plating sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2002	20 32 64 (*1)	2002.NP.SP.F.0
2022	64 72 (*2)	2022.NP.SP.F.0
*1) Availability from 1 to 64 contacts		
*2) Availability from 2 to 72 contacts		

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 2002H28.CL.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI, add letter B after F instead of the mark.

Example: 2002.20.CC.FB0

Other mating pin available upon request

To order with inner spring type SC6.065 (insertion Ø0.65-0.85), add letter C after F instead of the mark.

Example: 2002.40.CC.FC0 (only right version)

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 2002,2022

SIP 2.54mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / Breakable / Elevated pin

	Pin style	LC
	Plating sleeve (pin)	5.0µm Tin
	Plating contact (clip)	Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2002	20 32 64 (*1)	2002.NP.LC.F.0.LP
2022	64 72 (*2)	2022.NP.LC.F.0.LP
*1) Availability from 1 to 64 contacts		
*2) Availability from 2 to 72 contacts		

LP PIN LENGTH X (in mm) Other pin length X upon request					
5.6	6.0	7.0	8.0	9.0	10.2
12.0	13.5	15.1	16.3	18.0	22.0
29.0	33.0	35.0			

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

LC	
2002	2022

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 2022H28.LC.F.0.8.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI, add letter B after F instead of the mark.

Example: 2002H14.LC.FB0.6.0

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 2002,2022

SIP 2.54mm pitch / Sockets / Gull wing /
Floating pin / Mating pin 0.47mm / Breakable /
Surface mount

CC.SMH		CCST		CC.SMV	
2002		2002	2022	2002	2022
For Pick and Place, see Series 4001 PMH.SMHP		PCB Board $\varnothing$ 1.5			

Pin style		CC.SMH / CCST / CC.SMV
Plating sleeve (pin)		5.0 μ m Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2002	20 32 64 (*1)	2002HNP.SP.F
2022	64 72 (*2)	2022.NP.SP.F

*1) Available from: 3 to 64 contacts
*2) Available from: 4 to 72 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0 μ m standard Tin) by:

- .C 0.25 μ m gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25 μ m average Au
- .2 0.50 μ m average Au
- .3 0.75 μ m average Au
- .4 0.75 μ m minimum 24c Au (MIL STD)
- .6 5.0 μ m tin
- .00 5.0 μ m tin / lead non-RoHS

• Other height available: 7mm instead of 5.6mm
Please contact the customer service.

Available with Positioning options
(see GUIDE AND PAD description page 29)

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts $\varnothing$ 0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	$\varnothing$ 0.43 test pin Other forces available upon request.

Standard SC4	
Insertion	320g max.
Extraction	50g min.

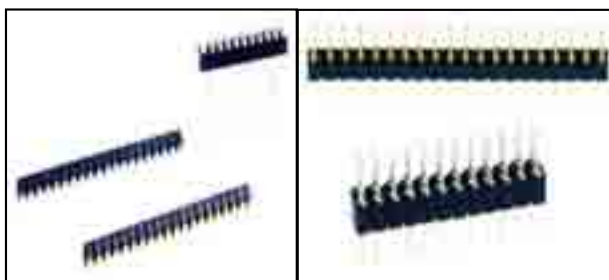
ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 m Ω max
Dielectric strength	1000 V _{RMS} min

SERIES 2002,2022

SIP 2.54mm pitch / Headers / Solder tail /
Wire-wrap / Connecting pin 0.47mm / Right angle /
Breakable / Turret and slotted head / Strip /
Solder cup / Piggy-back

TC / WT / WU		FF / JJ / KK	
2002	2022	2002	2022
TT / TU		PB	
2002	2022	2002	2022
XX / LL / MM		RR / SS	
2002	2022	2002	2022
ML / MLS		MC	
2002	2022	2002	2022

2/2


SERIES 2002,2022

SIP 2.54mm pitch / Headers / Solder tail /
Wire-wrap / Connecting pin 0.47mm / Right angle /
Breakable / Turret and slotted head / Strip /
Solder cup / Piggy-back

SP \ mm	X	Y	Z
TC	3.9	Ø 0.5	-
WT	12.95	Sq 0.635	-
WU	6.4	Sq 0.635	-
FF	3.9	Ø 0.5	-
JJ	12.95	Sq 0.635	-
KK	9.4	Sq 0.635	-
TT	4.2	Ø 0.64	4.8
TU	3.7	Ø 0.5	4.3
PB	6.4 / 8.4 / 15.4 / 21.2 / 27.4	-	-
XX	3.9	Ø 0.5	-
LL	12.95	Sq 0.635	-
MM	9.4	Sq 0.635	-
RR	12.95	-	-
SS	9.4	-	-

Pin style		TC / WT / WU / FF / JJ / KK / TT / TU / XX / LL / MM / RR / SS
Plating sleeve (pin)		5.0µm Tin
Plating contact (clip)		For FF / JJ / KK: 5.0 µm Sn Tin / Lead
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2002	20 32 60 64 (*1)	2002HNP.SP.F
2022	64 72 (*2)	2022HNP.SP.F

*1) Availability from 1 to 64 contacts
*2) Availability from 2 to 72 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS
- .S 0.25µm gold plating (connecting side)
5µm tin (PCB side)
- .S only available for TU style

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 2002H28.TT.F
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)

To order PB type, please add length X after the gold plating code
Example: 2002.24.PB.F.8.4

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 2002,2022

SIP 2.54mm pitch / Headers / Solder tail /
Connecting pin 0.76mm

PMH / PMHS / PMH7	
2002	2022

PMHH		PMH.F.L	
2002	2022	2002	2022

Pin style		PMH / PMHS / PMH7 / PMHH / PMH.F.L
Plating sleeve (pin)		5.0μm Tin
TYPE	NP Nbr PIN	ORDERING NUMBERS
2002	20 32 64 (*1)	2002.NP.SP.F
2022	64 72 (*2)	2022.NP.SP.F
2002	20 32 64 (*1)	2002.NP.PMH.F.L
2022	64 72 (*2)	2022.NP.PMH.F.L

*1) Availability from 1 to 64 contacts

*2) Availability from 2 to 72 contacts

mm	X	Y
SP		
PMHS	3.6	3.2
PMH	5.0	3.2
PMHH	4.3	4.76 (=0.8+2.8+1.16)
PMH7	7	3.2

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 2002H32.PMH.F
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min

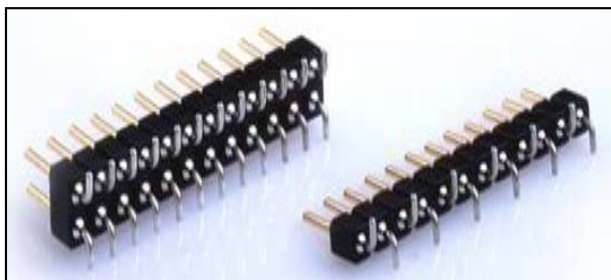
PLATING OPTIONS

Sleeve (pin), change letter F (5.0μm standard Tin) by:

- .C 0.25μm gold plating
- .O gold flash
- .D tin / lead non-RoHS
- .S 0.25μm gold plating (connecting side)
5μm tin (PCB side)
- .S only available for PMH, PMHS and
PMH7 style

SERIES 2002,2022

SIP 2.54mm pitch / Headers / Gull wing /
Floating pin / Connecting pin 0.76mm /
Surface mount



PMH.SMV / PMHS.SMV		PMH.SMH	PMHST / PMHSST
2002	2022	2002	2002 2022

SP	PMHST	PMHSST
PIN LENGTH X	5.0mm	3.6mm

PMH.SMHP
4001 (Pick and place)

* You can get a 2.8mm instead of a 3.8mm one for the single row version by ordering 2502H....

Available with Positioning options
(see GUIDE AND PAD description page 29)

Pin style		PMH.SMV / PMHS.SMV / PMH.SMH / PMH.SMHP / PMHST / PMHSST
Plating sleeve (pin)		5.0µm Tin
TYPE	NP Nbr PIN	ORDERING NUMBERS
2002	20 32 60 64 (*1)	2002HNP.SP.F
2022	40 44 56 64 72 (*2)	2022HNP.SP.F
2002	20 32 60 64 (*3)	2002HNP.SP.F
4001	48 (*4)	4001HNP.SP.F

- *1) Available from: 3 to 64 contacts
*2) Available from: 4 to 72 contacts
*3) Available from: 2 to 64 contacts
*4) Available from: 1 to 48 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS
- .S 0.25µm gold plating (connecting side)
5µm tin (PCB side)

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature (order with H) Example: 2002H32.PMH.SMV.F
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min

SERIES 2002,2022

SIP 2.54mm pitch / Headers / Gull wing /
Floating pin / Surface mount

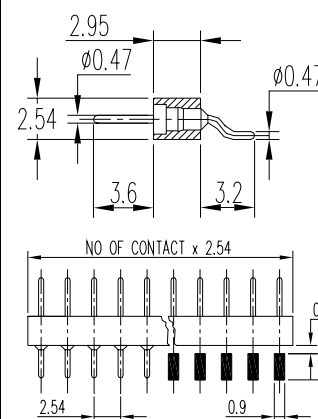


TU.SMV		TU.SMH	TUST
2002	2022	2002	2002 2022

Available with Positioning options
(see GUIDE AND PAD description page 29)

TU.SMHP

4001 (Pick and place)



* You can get a 3mm instead of a 4mm one for the single row version by ordering 2502H....

Pin style		TU.SMV / TU.SMH / TU.SMHP / TUST
Plating sleeve (pin)		5.0µm Tin
TYPE	NP Nbr PIN	ORDERING NUMBERS
2002	20 32 60 64 (*1)	2002HNP.SP.F
2022	40 44 56 64 72 (*2)	2022.NP.SP.F
2002	20 32 60 64 (*3)	2002.NP.SP.F
4001	48 (*4)	4001HNP.SP.F

*1) Available from: 3 to 64 contacts

*2) Available from: 4 to 72 contacts

*3) Available from: 1 to 64 contacts

*4) Available from: 1 to 48 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS
- .S 0.25µm gold plating (connecting side) 5µm tin (PCB side)

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 2002,2022

SIP 2.54mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / Surface mount /
Plastic carrier

CC.CC		CC.CK		CC.CCWT		CC.CKWT		CN.SWT / CN.SWU	
2002	2022	2002	2022	2002	2022	2002	2022	2002	2022

Pin style		CC.CC / CC.CK / CC.CCWT / CC.CKWT / CN.SWT / CN.SWU
Plating sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2002	20 32 64 (*1)	2002HNP.SP.F
2022	64 72 (*2)	2022.NP.SP.F
*1) Availability from 1 to 64 contacts		
*2) Availability from 2 to 72 contacts		

SP	CN.SWT	CN.SWU
PIN LENGTH X	3.6mm	6.3mm
PIN LENGTH Y	3.2mm	5.9mm

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 2022H28.CC.CK.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI, add letter B after F instead of the mark.

Example: 2022.32.CC.CK.FB0

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

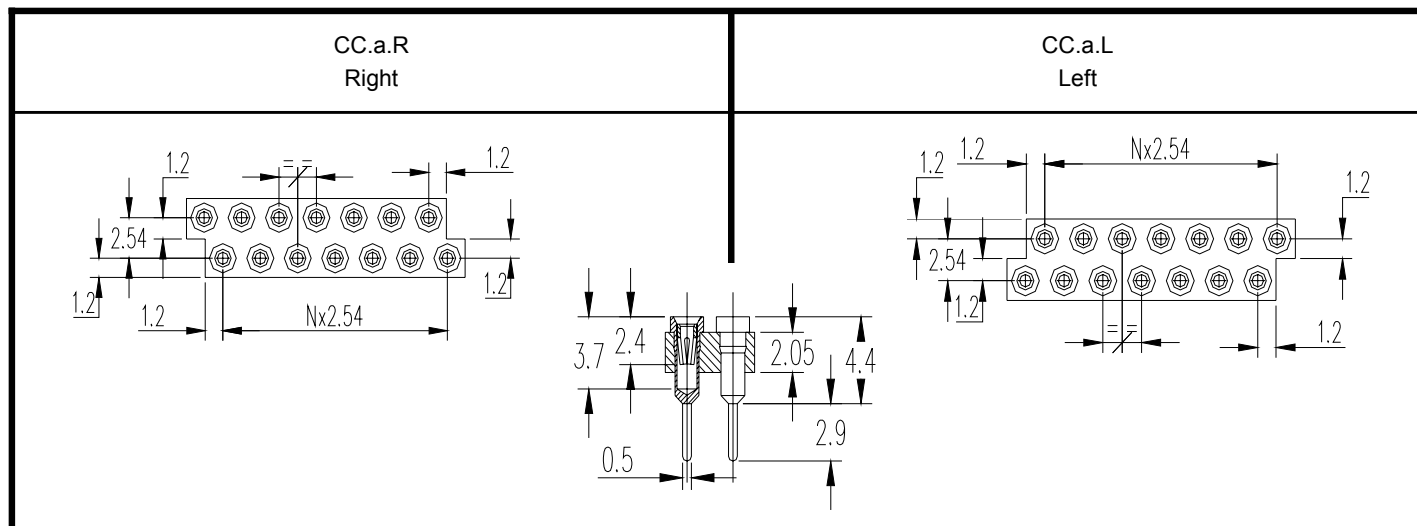
Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS



SERIES 2022.ZZ

SIP 2.54mm pitch / Sockets / Solder zig-zag /
Mating pin 0.47mm



Pin style		CC.a.R / CC.a.L
Plating sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2022	14* 16 20 24 28 30 40	2022.ZZ.NP.CC.F.0.R
		2022.ZZ.NP.CC.F.0.L
14* : pin strips are not stackable end to end		
Pin CC can be changed by all pins suitable for series 2002 and 2022 in straight version.		

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 2022.ZZH28.CC.F.0.R
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI, add letter B after F instead of the mark.

Example: 2022.ZZ.24.CC.FB0.R

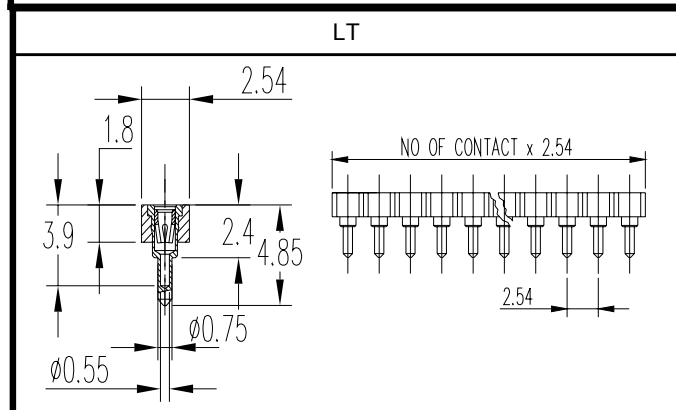
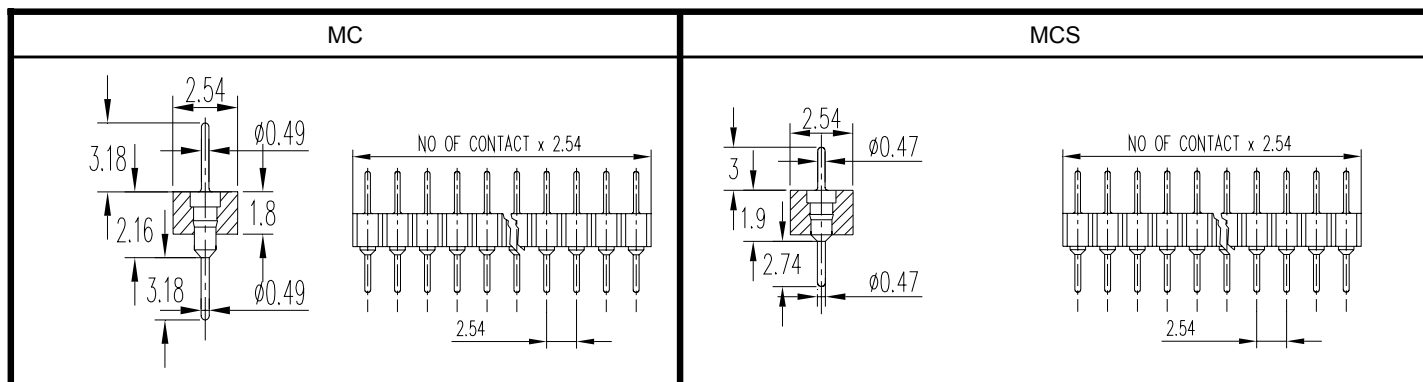
ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 2502

SIP 2.54mm pitch / Sockets and Headers /
Solder tail / Mating pin 0.47mm / Ultra low profile /
Breakable



Pin style		LT / MC / MCS
Plating sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2502	56 64 (*1)	2502.NP.SP.F.0

*1) Availability from 1 to 64 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 2502H64.MC.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4.SH		SC4	
Insertion	350g max.	Insertion	320g max.
Extraction	100g min.	Extraction	50g min.

To order with inner spring type SC4, add letter A after F instead of the mark.

Example: 2502.56.LT.FA0

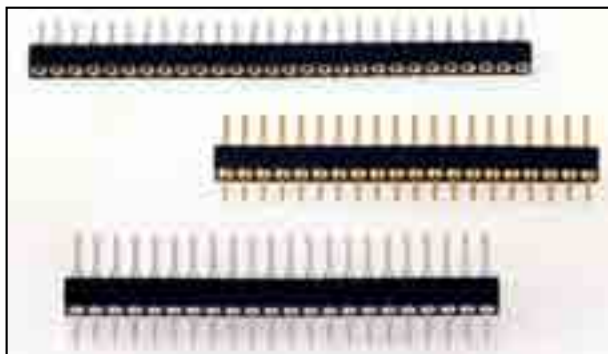
ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min

SERIES 2700

SIP / Sockets and Headers /

Shrinksp 1.778 spacing solder tail / Breakable



SD	MC	LC

Pin style		SD / MC / LC
Plating sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
SD	21 38 (*1)	2700.NP.SP.F.0
MC	21 38 (*1)	2700.NP.SP.F
LC	21 38 (*1)	2700.NP.SP.F.0.LP

*1) Availability from 1 to 38 contacts

SP	LC	
PIN LENGTH X	8.5mm	10.0mm
PIN LENGTH Y	3.2mm	4.0mm

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature Example: 2700H32.SD.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45

Standard SC4

Insertion	320g max.
Extraction	50g min.

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

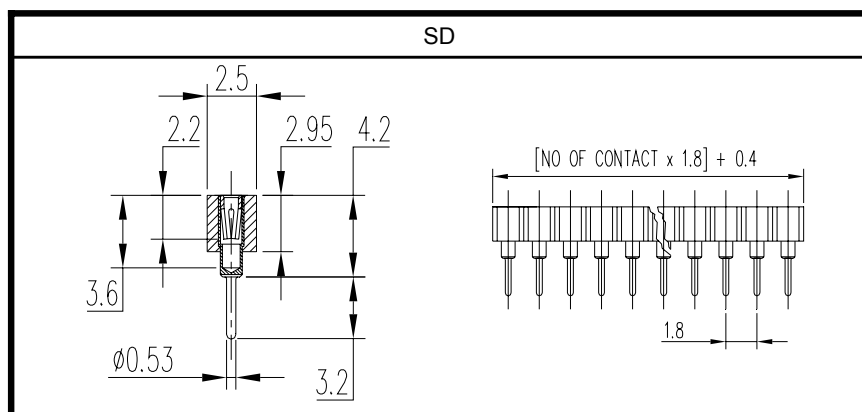
Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS



SERIES 2800

SIP / Sockets / Shrinksip 1.8 spacing solder tail / Breakable



Pin style		SD
Plating sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2800	42 (*1)	2800.NP.SP.F.0

*1) Availability from 1 to 42 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

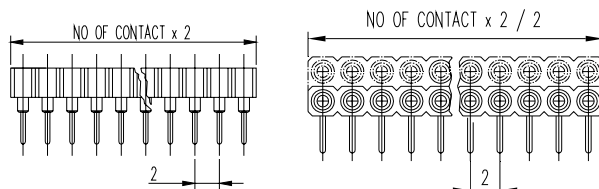
Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature Example: 2800H32.SD.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45

Standard SC4

Insertion	320g max.
Extraction	50g min.

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 2004,2044

SIP 2mm pitch / Sockets / Solder tail /
Mating pin 0.47mm / Square 0.50mm /
Breakable

LV	
2004	2044
NC / NB	
2004	2044
NDL / NDLS	
2004	2044

SP	NC	NB
X	3.2mm	3.6mm
Y	3.8mm	4.2mm

Pin style		NC / NB / NDL / NDLS / LV
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2004	50 (*1)	2004HNP.SP.F.0
2044	100 (*2)	2044HNP.SP.F.0

*1) Availability from 1 to 50 contacts

*2) Availability from 4 to 100 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 LCP = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45 and for square 0.50mm with SC6.VLI
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4		SC6.VLI For square 0.50mm	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI (strongly advised mating pin square 0.50mm), add letter B after F instead of the mark.

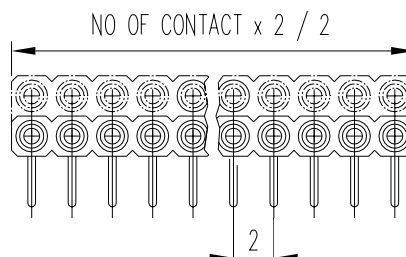
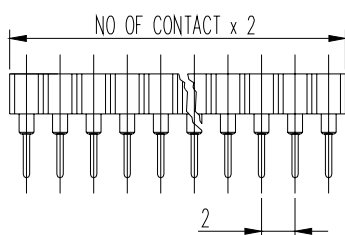
Example: 2004H28.ND.FB0

The NC series is available in the press-fit version NCPF.

For solderless mount in a PCB of thickness 1.5-2.4 mm, with plated thru-holes Ø 0.71+/- 0.06 mm.

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



MD		MDL	MDLS
2004	2044	2004	2044

Pin style		MD / MDL / MDLS /
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2004	50 (*1)	2004HNP.SP.F
2044	100 (*2)	2044HNP.SP.F
*1) Availability from 1 to 50 contacts		
*2) Availability from 4 to 100 contacts		

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS
- .S 0.25µm gold plating (connecting side)
5µm tin (PCB side)
- .S only available for MC style

SERIES 2004,2044

SIP 2mm pitch / Sockets and Headers /
Solder tail / Mating pin 0.47mm / Breakable

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 LCP = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 2004,2044

SIP 2mm pitch / Sockets and Headers /
Gull wing / Mating pin 0.47mm / Square 0.50mm /
Breakable / Surface mount



Available with Positioning options

(see GUIDE AND PAD description page 29)

ND.SMV		MD.SMV	
2004	2044	2004	2044

Pin style		ND.SMV / MD.SMV / MD.SMH / ND.SMH
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2004 ND	50 (*1)	2004HNP.SP.F.0
2044 ND	100 (*2)	2044HNP.SP.F.0
2004 MD	50 (*1)	2004HNP.SP.F
2044 MD	100 (*2)	2044HNP.SP.F

*1) Availability from 3 to 50 contacts

*2) Availability from 4 to 100 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS
- .S 0.25µm gold plating (connecting side)
5µm tin (PCB side)
- .S only available for MD style

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 LCP = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45 and for square 0.50mm with SC6.VLI
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4		SC6.VLI	
Insertion	320g max.	Insertion	70g max.
Extraction	50g min.	Extraction	10g min.

To order with inner spring type SC6.VLI (strongly advised mating pin square 0.50mm), add letter B after F instead of the mark.

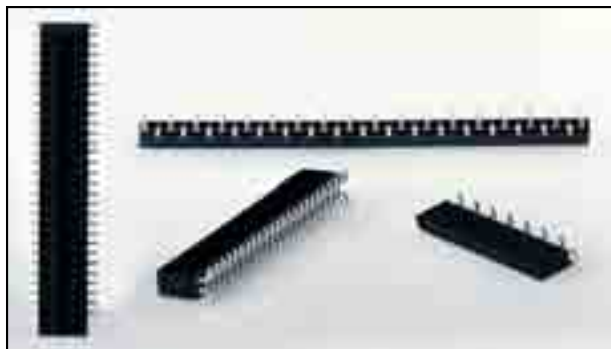
Example: 2004H28.ND.SMV.FB0

For reverse layout, write R after SMV

Example: 2004H28.ND.SMVR.FB0

ELECTRICAL DATA

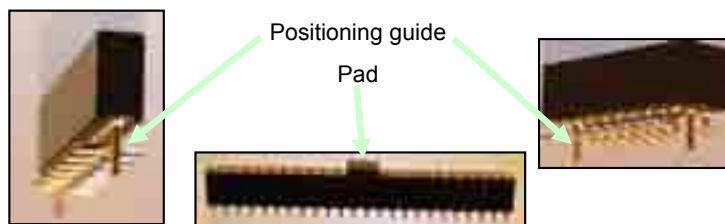
Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 4002,4022,4042

SIP 1.27mm pitch / Sockets / Gull wing /

Mating pin 0.43mm / Breakable / Surface mount



FH.SMV

4002	4022	4042

Pin style		FH.SMV
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
4002	50 (*1)	4002HNP.FH.SMV.F.0
4022	100 (*2)	4022HNP.FH.SMV.F.0
4042	100 (*2)	4042HNP.FH.SMV.F.0

*1) Availability from 3 to 50 contacts
*2) Availability from 4 to 100 contacts

Available with Positioning options
(see GUIDE AND PAD description page 29)

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC3	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.35-0.50
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC3

Insertion	150g max.
Extraction	30g min.

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	20 mΩ max
Dielectric strength	500 V _{RMS} min

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS



SERIES 4002,4022,4042

SIP 1.27mm pitch / Headers / Gull wing /
Breakable / Surface mount

MH.SMV

4002	4022	4042
*For a whole insulator: tolerance = +0.41 *For a cut insulator: tolerance = ±0.2		

Available with Positioning options
(see GUIDE AND PAD description page 29)

Pin style		FH.SMV
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
4002	50 (*1)	4002HNP.MH.SMV.F.0
4022	100 (*2)	4022HNP.MH.SMV.F.0
4042	100 (*2)	4042HNP.MH.SMV.F.0
*1) Availability from 3 to 50 contacts *2) Availability from 4 to 100 contacts		

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

With locating pins bottom view



TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	20 mΩ max
Dielectric strength	500 V _{RMS} min

**SERIES 4002**SIP 1.27mm pitch / Sockets and Headers /
Breakable / Surface mount horizontal**PACKAGING OPTIONS**

Box	Standard Example: 4002HNP.MH.SMH.F.0
Tape & Reel	Change the dash after NP into B Example: 4002HNPBMH.SMH.F.0
Tube	Change the dash after NP into T Example: 4002HNPTMH.SMH.F.0
Tray	Change the dash after NP into R Example: 4002HNPRMH.SMH.F.0

Please contact the customer service for availability

MH.SMH	MH.SMHP	MH.SMHS	FH.SMH / FH.SMHS
*For a whole insulator: tolerance = +0.41 *For a cut insulator: tolerance = ±0.2			

Pin style		MH. SMH / MH.SMHP / MH.SMHS / FH.SMH / FH.SMHS
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
4002	50 (*1)	4002HNP.FH.SMH.F.0
4002	50 (*1)	4022HNP.MH.SMH.C
*1) Availability from 1 to 50 contacts		

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

SP	FH.SMH	FH.SMHS
PIN LENGTH X	4.8	3.7

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC3	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.35-0.50
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC3

Insertion	150g max.
Extraction	30g min.

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	20 mΩ max
Dielectric strength	500 V _{RMS} min



SERIES 4002,4022,4042,4222

SIP 1.27mm pitch / Sockets / Mating pin 0.43mm / Breakable

FH

4002	4022	4042	4222

Pin style		FH
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
4002	50 (*1)	4002HNP.FH.F.0
4022	100 (*2)	4022HNP.FH.F.0
4042	100 (*2)	4042HNP.FH.F.0
4222	150 (*3)	4222HNP.FH.F.0
*1) Availability from 1 to 50 contacts *2) Availability from 4 to 100 contacts *3) Availability from 9 to 150 contacts		

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC3	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.35-0.50
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC3

Insertion	150g max.
Extraction	30g min.

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	20 mΩ max
Dielectric strength	500 V _{RMS} min



SERIES 4002,4022,4042,4222

SIP 1.27mm pitch / Sockets / Mating pin 0.43mm /
Right angle / Breakable

FH.F.L

4002	4022	4042	4222

Pin style		FH.F.L
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
4002	50 (*1)	4002HNP.FH.F.L.0
4022	100 (*2)	4022HNP.FH.F.L.0
4042	100 (*2)	4042HNP.FH.F.L.0
4222	150 (*3)	4222HNP.FH.F.L.0
*1) Availability from 1 to 50 contacts		
*2) Availability from 4 to 100 contacts		
*3) Availability from 6 to 150 contacts		

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC3	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.35-0.50
Insertion / Extraction	Ø0.43 test pin Other forces available upon request.

Standard SC4.SM

Insertion	150g max.
Extraction	30g min.

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	20 mΩ max
Dielectric strength	500 V _{RMS} min



SERIES 4002,4022,4042,4222

SIP 1.27mm pitch / Headers / Mating pin 0.43mm / Breakable

MH			
4002	4022	4042	4222
*For a whole insulator: tolerance = +0.41 *For a cut insulator: tolerance = ±0.2			

Pin style		MH
Plating Sleeve (pin)		5.0µm Tin
TYPE	NP Nbr PIN	ORDERING NUMBERS
4002	50 (*1)	4002HNP.MH.C.LP
4022	100 (*2)	4022HNP.MH.C.LP
4042	100 (*2)	4042HNP.MH.C
4222	150 (*3)	4222HNP.MH.C
*1) Availability from 1 to 50 contacts *2) Availability from 4 to 100 contacts *3) Availability from 9 to 150 contacts		

LP	X
08	3.2mm
09	3.6mm
12	6.6mm
13	7.9mm
15	10.0mm
Other pin length X upon request.	

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature (order with H) Example: 2700H32.SD.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	20 mΩ max
Dielectric strength	500 V _{RMS} min

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash

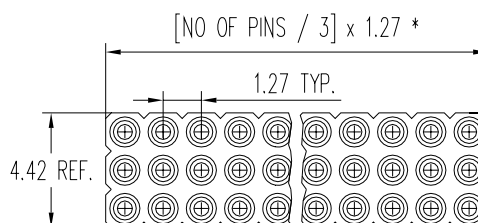


SERIES 4002,4022,4042,4222

SIP 1.27mm pitch / Headers / Mating pin 0.43mm /
Right angle / Breakable

MH.C.L			
4002	4022	4042	4222

LP	X
08	3.2mm
09	3.6mm
12	6.6mm
13	7.9mm
15	10.0mm
Other pin length X upon request.	



*For a whole insulator: tolerance = +0.41

*For a cut insulator: tolerance = ±0.2

Pin style		MH.C.L
Plating Sleeve (pin)		5.0µm Tin
TYPE	NP Nbr PIN	ORDERING NUMBERS
4002	50 (*1)	4002.NP.MH.C.L.LP
4022	100 (*2)	4022.NP.MH.C.L.LP
4042	100 (*2)	4042.NP.MH.C.L
4222	150 (*3)	4222.NP.MH.C.L
*1) Availability from 1 to 50 contacts		
*2) Availability from 4 to 100 contacts		
*3) Availability from 6 to 150 contacts		

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PBT = Standard PCT = high temperature (order with H) Example: 4022H32.MH.C.L
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)

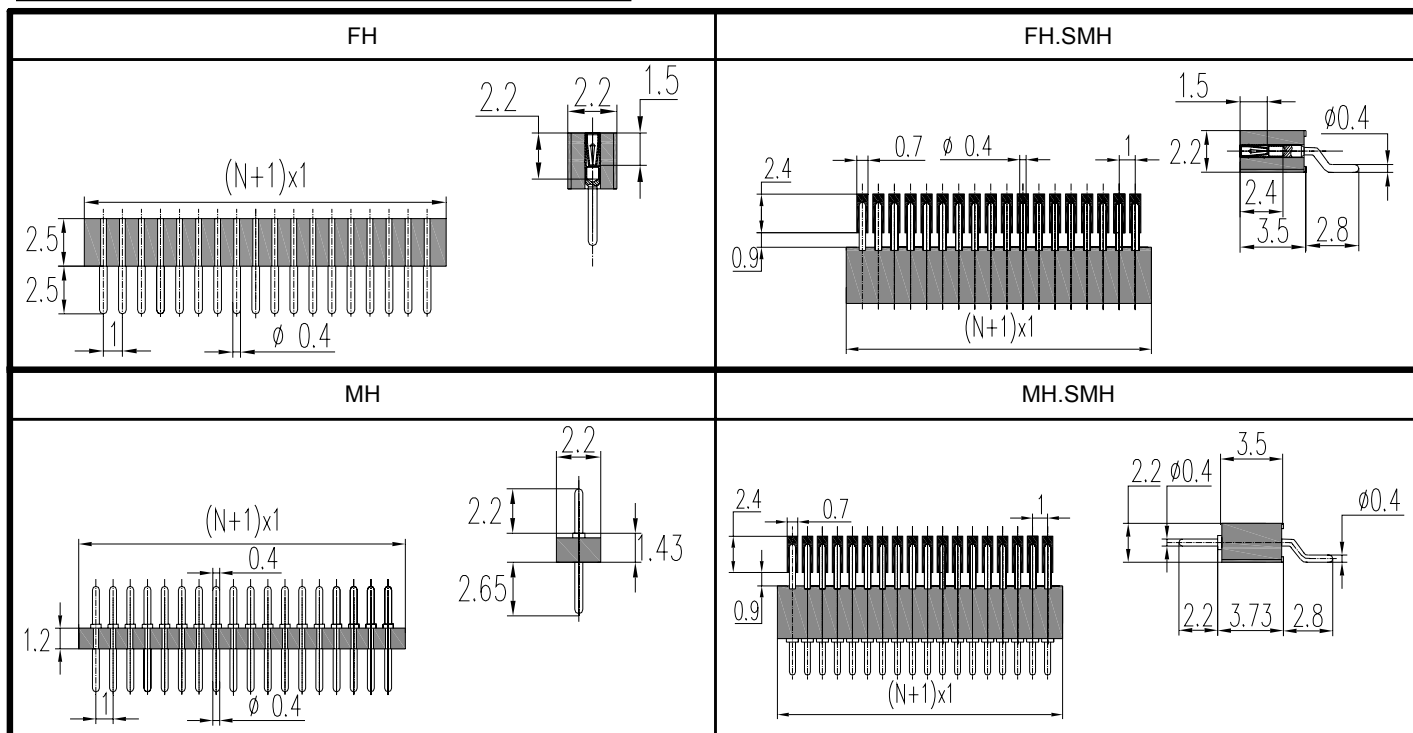
ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	20 mΩ max
Dielectric strength	500 V _{RMS} min



SERIES 2006

SIP 1mm pitch / Sockets and Headers / Solder tail /
Mating pin 0.36 to 0.46mm / Surface mount



Pin style		FH / FH.SMH / MH / MH.SMH
Plating Sleeve (pin)		5.0µm Tin (socket) 0.25µm Au (head)
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2006 (FH)	50 (*1)	2006HNP.FH.F.0
2006 (FH.SMH)	50 (*1)	2006HNP.FH.SMH.F.0
2006 (MH)	50 (*1)	2006HNP.MH.C
2006 (MH.SMH)	50 (*1)	2006HNP.MH.SMH.C

*1) Availability from 2 to 50 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC4	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.36-0.46
Insertion / Extraction	Ø0.40 test pin

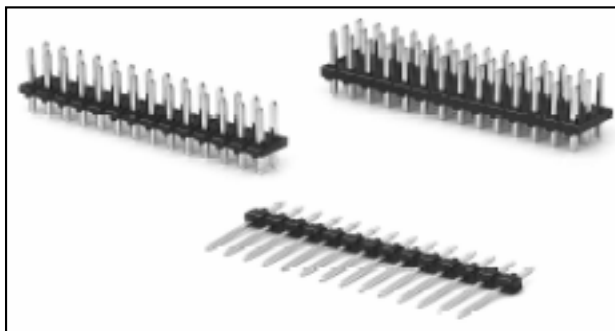
Standard	
Insertion	25g medium
Extraction	15g medium

ELECTRICAL DATA

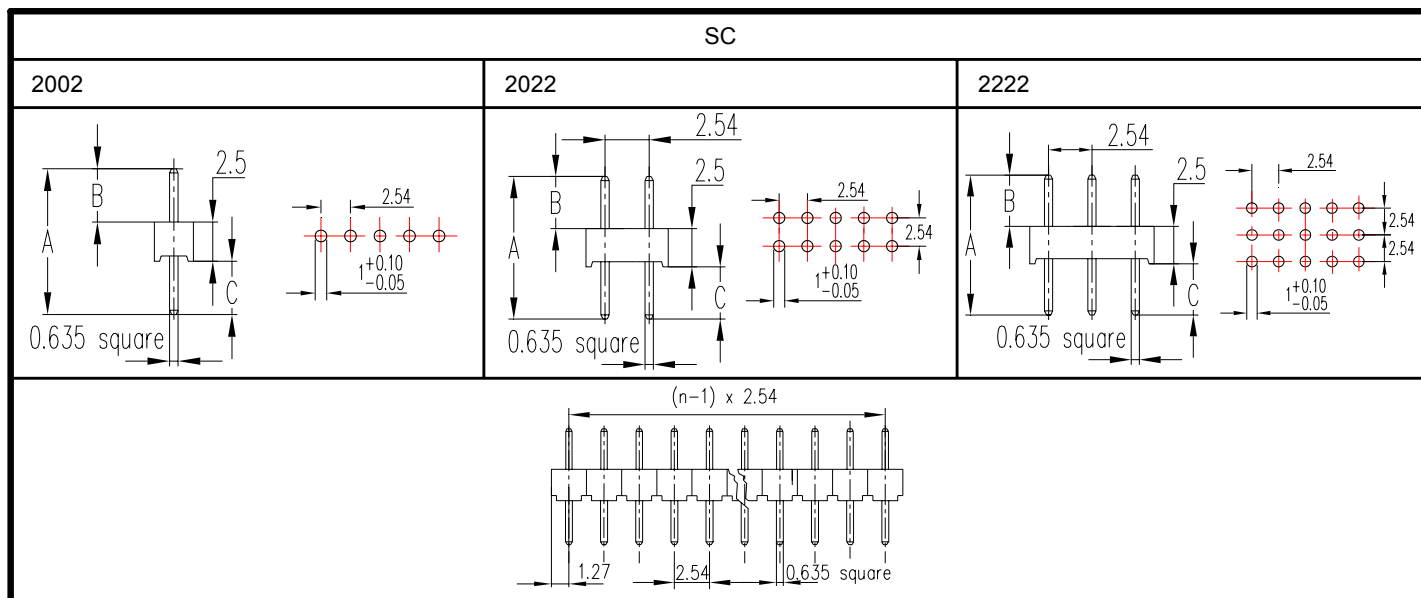
Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	500 V _{RMS} min

SERIES 2002,2022,2222

SIP 2.54mm pitch / Headers / Solder tail /
Mating pin square 0.635mm / Breakable



SC



Pin style		SC
Plating sleeve (pin)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
4002	50 (*1)	2002HNP.SC.C.LP
4022	100 (*2)	2022HNP.SC.C.LP
4222	150 (*3)	2222HNP.SC.C.LP

*1) Availability from 1 to 50 contacts
*2) Availability from 4 to 100 contacts
*3) Availability from 9 to 150 contacts

LP	A	B	C
10	10.2mm	5.2mm	2.5mm
11	10.8mm	5.8mm	2.5mm
12	11.3mm	5.3mm	3.3mm
13	12.6mm	6.8mm	3.3mm
14	13.9mm	8.1mm	3.3mm
15	14.7mm	8.9mm	3.3mm
16	17.7mm	11.9mm	3.3mm
17	19.8mm	14.0mm	3.3mm
18	21.6mm	15.8mm	3.3mm
19	22.8mm	17.0mm	3.3mm
20	24.9mm	19.1mm	3.3mm

Other pin length X upon request.

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .B 0.75µm gold plating
- .S 0.25µm gold plating (connecting side)
5µm tin (PCB side)
- .S2 0.75µm gold plating (connecting side)
5µm tin (PCB side)

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0
Outer shell (sleeve)	Square pin 0.635mm, CuZn30 acc. To Din 17660

ELECTRICAL DATA

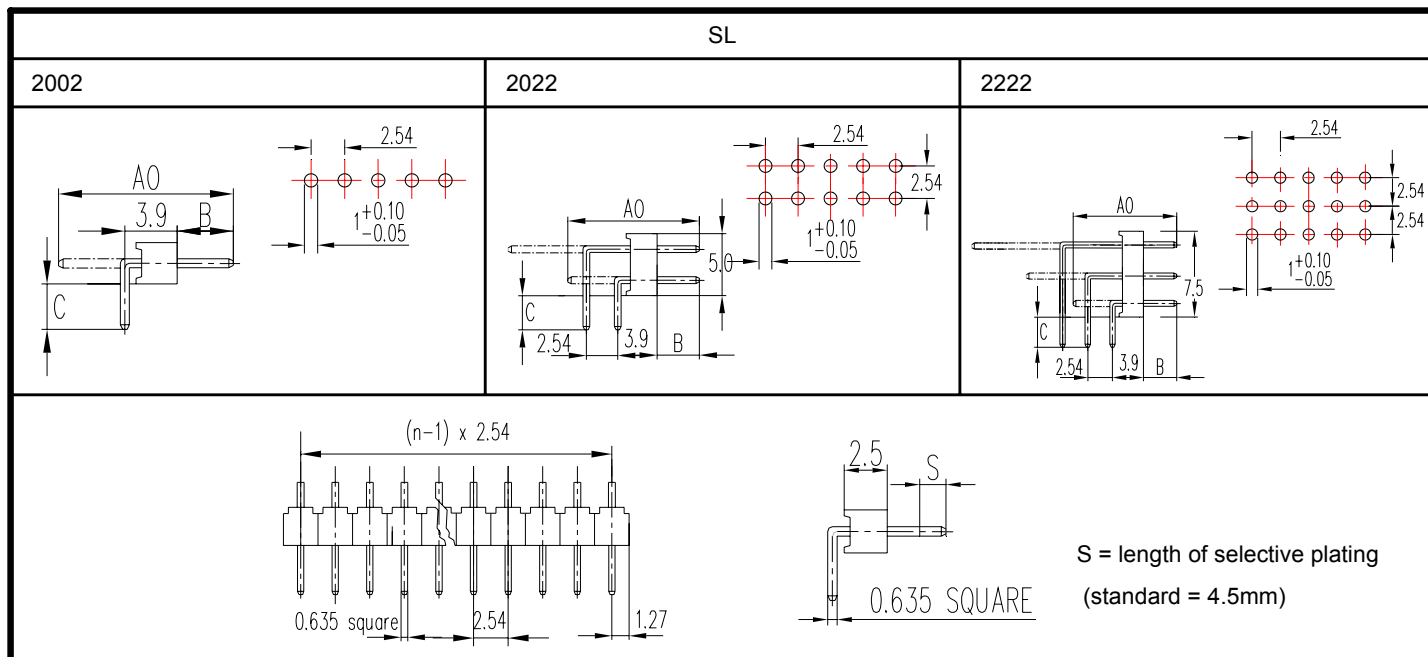
Rated current	3A
Current voltage	250V AC
Contact resistance	20 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 2002,2022,2222

SIP 2.54mm pitch / Headers / Solder tail /
Mating pin square 0.635mm / Right angle /
Breakable

SL



Pin style		SL
Plating sleeve (pin)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
4002	50 (*1)	2002HNP.SL.C.LP
4022	100 (*2)	2022HNP.SL.C.LP
4222	150 (*3)	2222HNP.SL.C.LP

*1) Availability from 1 to 50 contacts
*2) Availability from 4 to 100 contacts
*3) Availability from 9 to 150 contacts

LP	AO	B	C
12	11.3mm	3.5mm	3.3mm
13	12.6mm	4.8mm	3.3mm
14	13.9mm	6.1mm	3.3mm
15	14.7mm	6.9mm	3.3mm
16	17.7mm	9.9mm	3.3mm
17	19.8mm	12.0mm	3.3mm
18	21.6mm	13.8mm	3.3mm
19	22.8mm	15.0mm	3.3mm
20	24.9mm	17.1mm	3.3mm

Other pin length X upon request.

PLATING OPTIONS

Sleeve (pin), change letter C (0.25µm gold plating) by:

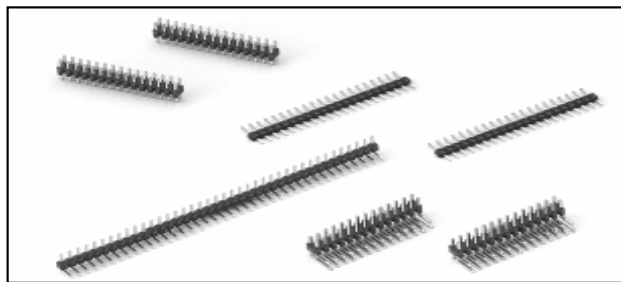
- .O gold flash
- .F 5.0µm standard Tin
- .B 0.75µm gold plating
- .S 0.25µm gold plating (connecting side)
5µm tin (PCB side)
- .S2 0.75µm gold plating (connecting side)
5µm tin (PCB side)

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0
Outer shell (sleeve)	Square pin 0.635mm, CuZn30 acc. To Din 17660

ELECTRICAL DATA

Rated current	3A
Current voltage	250V AC
Contact resistance	20 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 2004,2044,2444

SIP 2mm pitch / Headers / Solder tail /
Mating pin square 0.5mm /
Straight and right angle / Breakable

SC / SB		SL / SO		SLS / SOS	
2004	2044	2004		2044	

Pin style		SC / SB / SL / SO / SLS / SOS
Plating Sleeve (pin)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2004	40 (*1)	2004.NP.SP.0
2044	100 (*2)	2044.NP.SP.0
*1) Availability from 1 to 40 contacts *2) Availability from 2 to 80 contacts		

SP	SC	SB	SL	SO	SLS	SOS
PIN LENGTH B	4.4mm	3.9mm	4.4mm	3.9mm	4.4mm	3.9mm
INSULATOR HEIGHT	1.5mm	2mm	1.5mm	2mm	1.5mm	2mm

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0
Outer shell (sleeve)	Square pin 0.635mm, CuZn30 acc. To Din 17660

PLATING OPTIONS

Sleeve (pin), change letter O (gold flash) by:

- .F 5.0µm standard Tin
- .S 0.25µm gold plating (connecting side)
5µm tin (PCB side)

ELECTRICAL DATA

Rated current	3A
Current voltage	250V AC
Contact resistance	20 mΩ max
Dielectric strength	500 V _{RMS} min

PCB

SERIES SP		2001 / 2011 / 2111 Height 7mm	3001 / 3011 / 3111 / 3211 Height 4.2mm	4001 / 4011 Height 2.95mm	5001 / 5011 / 6001 / 6011 Height 8-8.5mm	7001 / 7011
SOCKETS	PFH	60	63	64	66	67
	PFHW	60				
	PFH.F.L	61		64		
	PFA	60				
	PFB	60				
	PFH.SMV	62		65		
	PFH.SMH PFH.SMHP	62		65		
	GCP			64		

Standard PCB

2001

NP

SP

F

0

LP

Series.

For insulator without center bar
replace 0 by 1 at the serie n° end.

.	Standard
A	Automatic (Only with pin CC)
H	High temperature insulator
HA	High temperature Automatic ass.

Number of pins

Type of contacts

.=standard

For pitch x2, x3,x4, or other pitch:

Example: 2001H20.PFH2F.0 (2.54X2=5.08)

Length code

(only for series for those is needed)

Clip plating option

.	Standard on catalog page
A	SC4
B	SC6.VLI
C	SC6.065
?	Etc.

Pin plating option

Available with Positioning options (see GUIDE AND PAD description page 29)

Custom PCB

2001

NP

/ 16

SP

F

0

LP

Series

For insulator without center bar
replace 0 by 1 at the serie n"

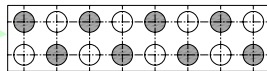
.	Standard
A	Automatic (Only with pin CC)
H	High temperature
HA	High temperature Automatic

Number of pins

/ = first version, B,C,... next versions

Number of positions

2011.8/16.PFH.F.0



Length code

(only for series for those is needed)

Clip plating option

.	Standard on catalog page
A	SC4
B	SC6.VLI
?	Etc.

Pin plating option

.=standard

For pitch x2, x3,x4, or other pitch:

Example: 2001H20/16.PFH2F.0 (2.54X2=5.08)

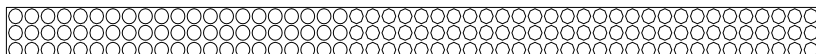
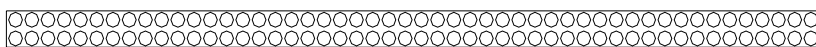
Type of contacts

Available with Positioning options (see GUIDE AND PAD description page 29)

To order a special PCB

Customer			
Address			
ZIP		City	
Country			
Phone			
Fax			
E-mail			

PCB



Series	
Type of construction	
Number of pins	
Number of positions	
Type of contact (can be yours)	
Pin plating option	
Type of clip (can be yours)	
Clip plating option	
Length code (if requested)	

Fill in the holes where you want the contacts. If your request isn't standard, please send us a detailed drawing. For the very specific design, insulator is made in Epoxy.



SERIES 2001,2011,2111

PCB 2.54mm pitch / Sockets / Solder tail /
Wire-wrap / Mating pin 0.47mm / 0.76mm / 1mm /
Strip / Height 7mm

PFH / PFHW			PFA Press-fit	PFB Press-fit
2001	2011	2111		

SP	PFH Solder tail straight		PFHW Wire-wrap
X	3mm	*4mm	13.1mm
Y	Ø0.60mm		Sq 0.635mm
*For 4mm, add 4 after F Example: 2001.36.PFH.F4.0			

Pin style		PFH / PFHW / PFA / PFB
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2001	36 50 (*1)	2001.NP.SP.F.LP.0
2011	72 100 (*2)	2011.NP.SP.F.LP.0
2111	96 (*3)	2111.NP.SP.F.LP.0

*1) Availability from 1 to 50 contacts

*2) Availability from 2 to 100 contacts

*3) Availability from 3 to 96 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 2001H28.PFH.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC6.065	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.65-0.85 or rectangular pin 0.65 x 0.65
Insertion / Extraction	Per line Other forces available upon request.

Standard SC6.065	
Insertion	100g max.
Extraction	30g min.

Other hard forces available upon request

Insertion max 375gr and extraction min 100gr.

To order with hard force add letter V after the F instead of the mark.

Example: 2001.50.PFH.FV0

Other mating pin available upon request

To order with inner spring type SC4 (insertion Ø0.40-0.56) or SC6.VLI (insertion Ø0.40-0.56), add letter A (SC4) or B (SC6.VLI) after F instead of the mark. For insertion Ø0.95-1.05, add letter I.

Examples: 2001.50.PFH.FA0 or 2001.50.PFH.FI0

A, B and I available only for straight type.

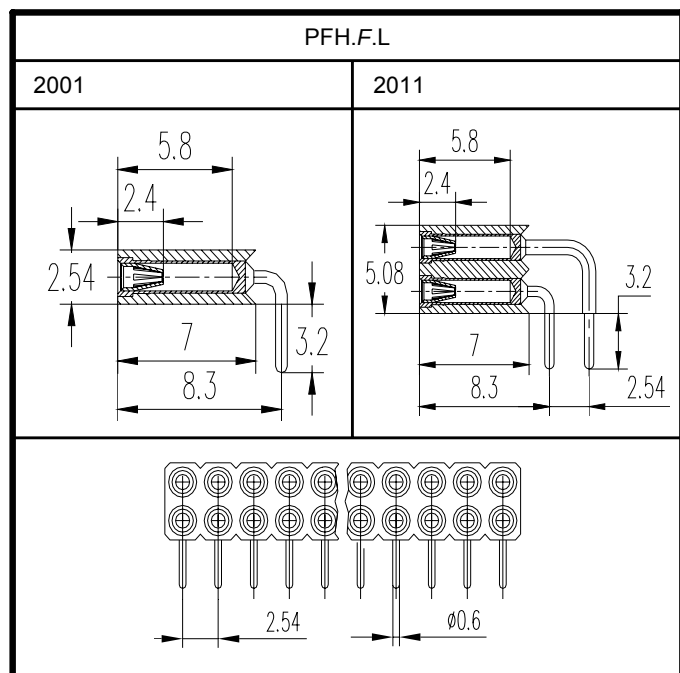
ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 2001,2011

PCB 2.54mm pitch / Sockets / Solder tail /
Wire-wrap / Mating pin 0.47mm / 0.76mm / 1mm /
Strip / Height 7mm



Pin style		PFH.F.L
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2001	36 50 (*1)	2001.NP.SP.F.L.0
2011	72 100 (*2)	2011.NP.SP.F.L.0

*1) Availability from 1 to 50 contacts
*2) Availability from 2 to 100 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 2001H28.PFH.F.L.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC6.065	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.65-0.85 or rectangular pin 0.65 x 0.65
Insertion / Extraction	Per line Other forces available upon request.

Standard SC6.065

Insertion	100g max.
Extraction	30g min.

Other hard forces available upon request

Insertion max 375gr and extraction min 100gr.

To order with hard force add letter V after the L instead of the mark.

Example: 2001.50.PFH.F.LV0

Other mating pin available upon request

To order with inner spring type SC4 (insertion Ø0.40-0.56) or SC6.VLI (insertion Ø0.40-0.56), add letter A (SC4) or B (SC6.VLI) after L instead of the mark. For insertion Ø0.95-1.05, add letter I.

Examples: 2001.50.PFH.F.LA0 or 2001.50.PFH.F.LI0

A, B and I available only for straight type.

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 2001,2011

PCB 2.54mm pitch / Sockets /

Mating pin 0.47mm / 0.76mm / 1mm / Strip /

Height 7mm / Surface mount

With locating pegs



PFH.SMV		PFH.SMH	PFH.SMHP
2001	2011	2001	2001

Available with Positioning options

(see GUIDE AND PAD description page 29)

Pin style		PFH.SMV / PFH.SMH / PFH.SMHP
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
2001	36 50 (*1)	2001HNP.PFH.SMV.F.0
2011	72 100 (*2)	2011HNP.PFH.SMV.F.0
2001	36 50 (*3)	2001HNP.PFH.SMH.F.0
2001	48 (*4)	2001HNP.PFH.SMHP.F.0

*1) Availability from 3 to 50 contacts

*2) Availability from 4 to 100 contacts

*3) Availability from 1 to 50 contacts

*4) Availability from 1 to 48 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range

-55°C to +125°C

Insulator body

Glass filled thermoplastic polyester,
self-extinguishing, rated UL94V-0

PCT = high temperature

Outer shell (sleeve)

Screw machined Brass CuZn36Pb3
(C36000)

Inner spring contact SC6.065

Stamped and formed BeCu
(C17200) gold or tin plated, accepts
Ø0.65-0.85 or rectangular pin 0.65 x
0.65

Insertion / Extraction

Per line

Other forces available upon request.

Standard SC6.065

Insertion	100g max.
Extraction	30g min.

Other hard forces available upon request

Insertion max 375gr and extraction min 100gr.

To order with hard force add letter V after the F instead of the mark.

Example: 2001H50.PFH.SMV.FV0

Other mating pin available upon request

To order with inner spring type SC4 (insertion Ø0.40-0.56) or SC6.VLI (insertion Ø0.40-0.56), add letter A (SC4) or B (SC6.VLI) after L instead of the mark. For insertion Ø0.95-1.05, add letter I.

Examples: 2001.50.PFH.SMV.FA0 or 2001.50.PFH.SMV.FI0

A, B and I available only for SMV type.

ELECTRICAL DATA

Rated current

3A

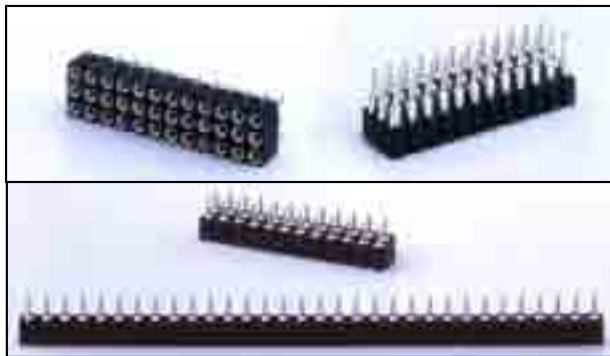
Maxi working voltage

100V_{RMS} / 150 V_{dc}
Contact resistance

10 mΩ max

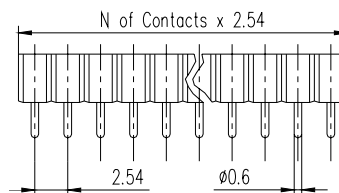
Dielectric strength

1000 V_{RMS} min



SERIES 3001,3011,3111,3211

PCB 2.54mm pitch / Sockets / Solder tail /
Wire-wrap / Mating pin 0.47mm / 0.76mm / 1mm /
Strip / Height 4.2mm



PFH

3001	3011	3111	3211

Pin style		PFH
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
3001	14 20 32 (*1)	3001.NP.PFH.F.0
3011	64 (*2)	3011.NP.PFH.F.0
3111	96 (*3)	3111.NP.PFH.F.0
3211	96 (*3)	3211.NP.PFH.F.0

*1) Availability from 1 to 32 contacts
*2) Availability from 4 to 64 contacts
*3) Availability from 9 to 96 contacts

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 3001H28.PFH.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC6.065	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.65-0.85 or rectangular pin 0.65 x 0.65
Insertion / Extraction	Per line Other forces available upon request.

Standard SC6.065	
Insertion	100g max.
Extraction	30g min.

Other hard forces available upon request

Insertion max 375gr and extraction min 100gr.

To order with hard force add letter V after the F instead of the mark.

Example: 3001.50.PFH.FV0

Other mating pin available upon request

To order with inner spring type SC4 (insertion Ø0.40-0.56) or SC6.VLI (insertion Ø0.40-0.56), add letter A (SC4) or B (SC6.VLI) after L instead of the mark. For insertion Ø0.95-1.05, add letter I.

Examples: 3001.50.PFH.FA0 or 3001.50.PFH.FI0

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 4001,4011

PCB 2.54mm pitch / Sockets / Solder tail /
Wire-wrap / Mating pin 0.47mm / 0.76mm / 1mm /
Strip / Height 2.9mm

PFH		GCP (only for insertion Ø0.95-1.05)	
4001	4011	4001	4011

PFH.F.L	
4001	

Pin style		PFH / PFH.F.L / GCP
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
4001	64 (*1)	4001.NP.PFH.F.0
4011	64 (*2)	4011.NP.PFH.F.0
4001	64 (*1)	4001.NP.PFH.F.L.0

*1) Availability from 1 to 64 contacts

*2) Availability from 4 to 72 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 4001H28.PFH.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC6.065	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.65-0.85 or rectangular pin 0.65 x 0.65
Insertion / Extraction	Per line Other forces available upon request.

Standard SC6.065

Insertion	100g max.
Extraction	30g min.

Other hard forces available upon request

Insertion max 375gr and extraction min 100gr.

To order with hard force add letter V after the F instead of the mark.

Example: 4001.50.PFH.FV0

Other mating pin available upon request

To order with inner spring type SC4 (insertion Ø0.40-0.56) or SC6.VLI (insertion Ø0.40-0.56), add letter A (SC4) or B (SC6.VLI) after L instead of the mark. For insertion Ø0.95-1.05, add letter I.

Examples: 4001.50.PFH.FA0 or 4001.50.PFH.FI0

A, B and I available only for straight type.

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 4001,4011

PCB 2.54mm pitch / Sockets /
Mating pin 0.47mm / 0.76mm / Strip /
Height 2.9mm / Surface mount

PFH.SMV		PFH.SMH	PFH.SMHP
4001	4011	4001	4001 (Pick and place)

Pin style		PFH.SMV / PFH.SMH / PFH.SMHP
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
4001	64 (*1)	4001HNP.PFH.SMV.F.0
4011	40 72 (*2)	4011HNP.PFH.SMV.F.0
4001	64 (*3)	4001HNP.PFH.SMH.F.0
4001	4/ (*4)	4001HNP.PFH.SMHP.F.0

*1) Availability from 3 to 50 contacts
*2) Availability from 4 to 72 contacts
*3) Availability from 1 to 64 contacts
*4) Availability from 1 to 48 contacts

Available with Positioning options
(see GUIDE AND PAD description page 29)

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC6.065	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.65-0.85 or rectangular pin 0.65 x 0.65
Insertion / Extraction	Per line

Standard SC6.065

Insertion	100g max.
Extraction	30g min.

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 5001,5011,6001,6011

PCB 2.54mm pitch / Sockets / Solder tail /
Wire-wrap / Mating pin 0.47mm / 0.76mm / 1mm /
Strip / Height 8mm and 8.5mm

PFH		PFH	
5001	5011	6001	6011



Pin style		PFH
Plating Sleeve (pin)		5.0µm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
5001	36 (*1)	5001.NP.PFH.F.0
5011	72 100 (*2)	5011.NP.PFH.F.0
6001	36 (*1)	6001.NP.PFH.F.0
6011	72 100 (*2)	6011.NP.PFH.F.0

*1) Availability from 1 to 36 contacts

*2) Availability from 4 to 100 contacts

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 5001H36.PFH.F.0
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC6.065	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.65-0.85 or rectangular pin 0.65 x 0.65
Insertion / Extraction	Per line Other forces available upon request.

Standard SC6.065	
Insertion	100g max.
Extraction	30g min.

Other hard forces available upon request

Insertion max 375gr and extraction min 100gr.

To order with hard force add letter V after the F instead of the mark.

Example: 6001.50.PFH.FV0

Other mating pin available upon request

To order with inner spring type SC4 (insertion Ø0.40-0.56) or SC6.VLI (insertion Ø0.40-0.56), add letter A (SC4) or B (SC6.VLI) after L instead of the mark. For insertion Ø0.95-1.05, add letter I.

Examples: 5001.36.PFH.FA0 or 6011.100.PFH.FI0

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min



SERIES 7001,7011

PCB 2.54mm pitch / Sockets / Solder tail /
Wire-wrap / Mating pin 0.47mm / 0.76mm / 1mm /
Strip / Height xx

PFH		PFH.F.LP	
7001	7011	7001	7011

LP PIN LENGTH X (in mm) Other pin length X upon request

14.0	17.0	-	-	-	-
------	------	---	---	---	---

Pin style		PFH / PFH.F.LP
Plating Sleeve (pin)		5.0μm Tin
Plating contact (clip)		Au 24c flash
TYPE	NP Nbr PIN	ORDERING NUMBERS
7001	50 (*1)	7001.NP.PFH.F.0.LP
7011	72 100 (*2)	7011.NP.PFH.F.0.LP

*1) Availability from 1 to 50 contacts

*2) Availability from 4 to 72 contacts or 100 contacts
(according to the LP)

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCB = standard PCT = high temperature (order with H) Example: 7001H36.PFH.F.0.14
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC6.065	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.65-0.85 or rectangular pin 0.65 x 0.65
Insertion / Extraction	Per line Other forces available upon request.

Standard SC6.065

Insertion	100g max.
Extraction	30g min.

Other hard forces available upon request

Insertion max 375gr and extraction min 100gr.

To order with hard force add letter V after the F instead of the
mark.

Example: 7001.50.PFH.FV0.14

Other mating pin available upon request

To order with inner spring type SC4 (insertion Ø0.40-0.56) or
SC6.VLI (insertion Ø0.40-0.56), add letter A (SC4) or B (SC6.VLI)
after L instead of the mark. For insertion Ø0.95-1.05, add letter I.

Examples: 7001.36.PFH.FA0.17 or 7011.100.PFH.FI0.14

PLATING OPTIONS

Sleeve (pin), change letter F (5.0μm standard Tin) by:

- .C 0.25μm gold plating
- .O gold flash
- .D tin / lead non-RoHS

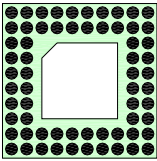
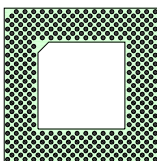
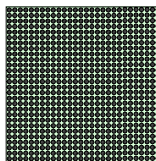
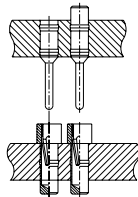
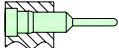
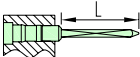
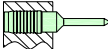
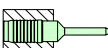
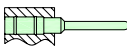
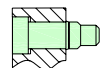
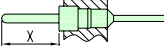
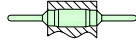
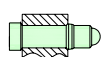
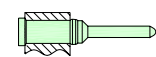
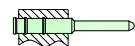
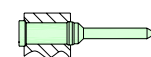
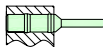
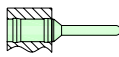
Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25μm average Au
- .4 0.75μm minimum 24c Au (MIL STD)
- .6 5.0μm tin
- .00 5.0μm tin / lead non-RoHS

ELECTRICAL DATA

Rated current	3A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min

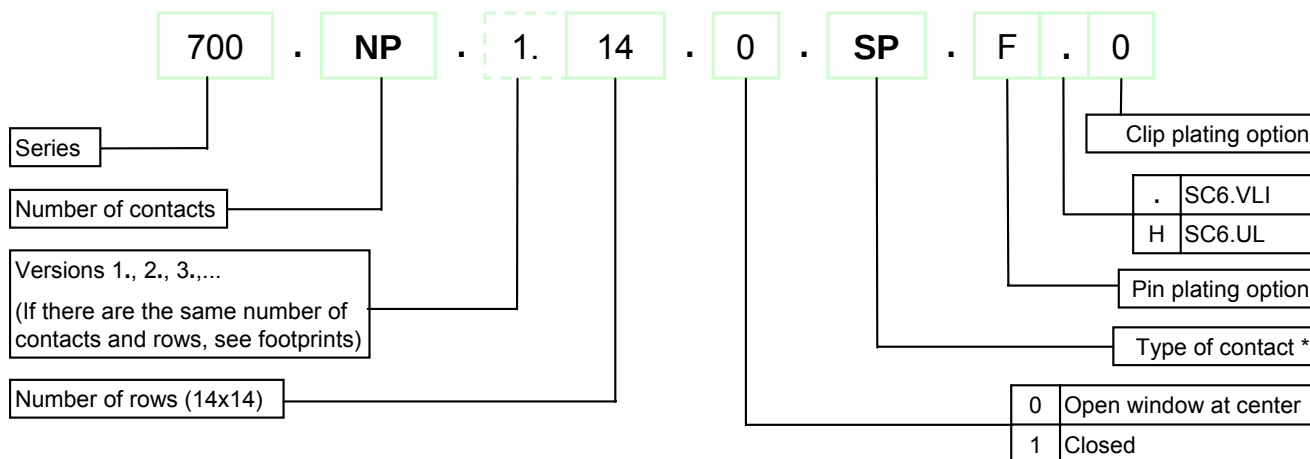
PGA

SERIES SP		PGA 700 / 701 2.54mm pitch	PGA 703 / 705 2.54mm pitch Zig-zag	PGA 704 1.27mm pitch Chip saver	BGA 706 / 707 / 709 1.27, 1 or 1.5mm pitch
					
SOCKETS	CC				
	AA				
	NC		74		
	NCS		74		
	FH			78	79
	CCWT		74		
	CCST floating		74		
HEADERS	ME		74		
	TT			78	
	AD				79
	BD				79
BALLS	BE				79
	BF				79
	BG				79
	BH				79
	BK				79
	BI				79
	BJ				79

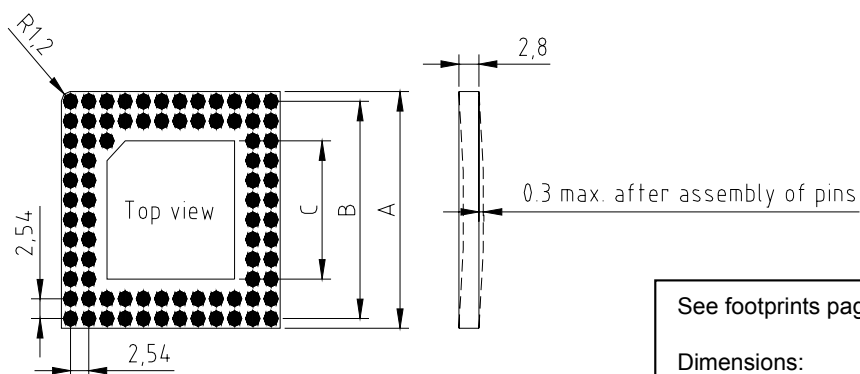
You can choose almost all the headers and sockets of Series 610 and 2002 (2.54mm pitch)
Please contact the customer service.

SERIES 700,701

PGA / IC sockets / Grid array



* PGA sockets come with standard pin CC or with wire-wrap tail AA as well as other type of contacts. Most of the contacts described in the previous pages can be assembled in PGA configuration.



A	$n1 \times 2.54$
B	$(n1 - 1) \times 2.54$
C	$(n2 \times 2.54) - 0.40$

See footprints pages 70-72

Dimensions: $n1$ = number of contacts in one line
 $n2$ = number of pitches in the window

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = série 700 Epoxy FR-4 = série 701
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC6.VLI	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.40-0.56 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.43 test pin (SC6.VLI) or Ø0.46 test pin (SC6.UL) Other forces available upon request.

SC6.VLI		SC6.UL	
Insertion	70g max.	Insertion	20g max.
Extraction	10g min.	Extraction	5g min.

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

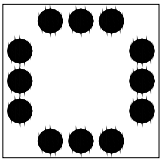
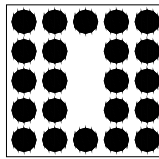
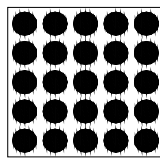
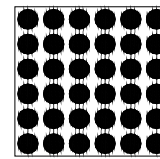
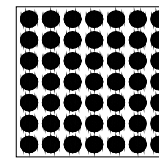
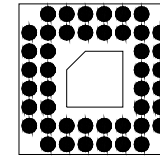
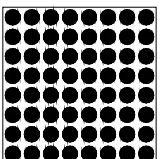
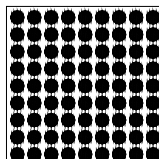
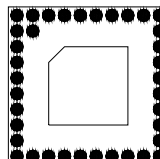
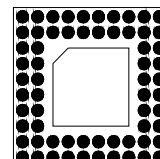
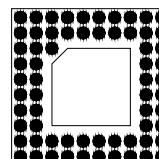
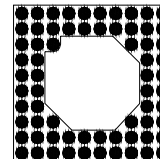
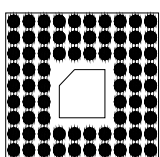
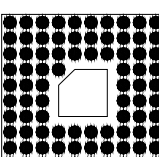
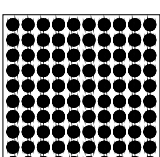
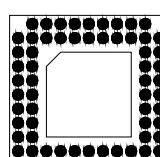
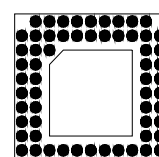
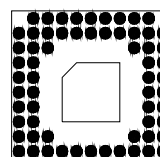
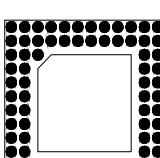
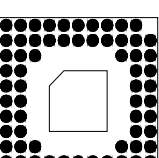
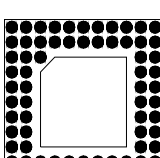
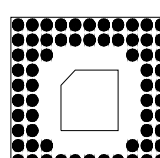
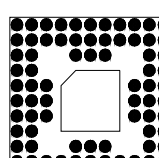
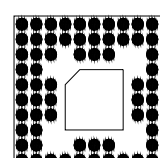
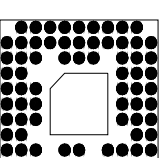
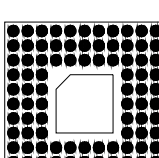
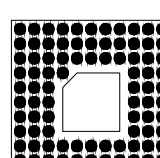
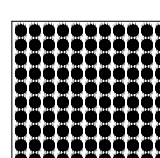
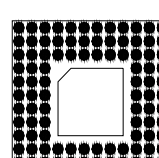
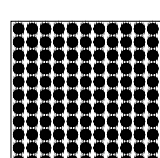
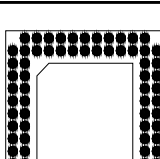
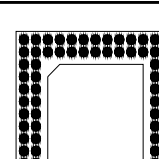
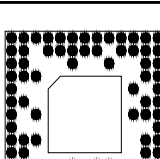
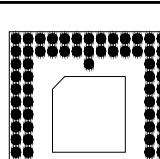
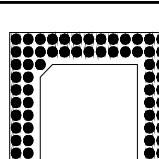
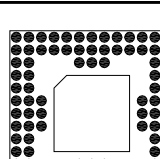
ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	1000 V _{RMS} min

SERIES 700,701

PGA / IC sockets / Grid array

1/3

5x5			6x6	7x7	8x8
					
700.012.5.1.SP.F.0	700.022.5.1.SP.F.0	700.025.5.1.SP.F.0	700.036.6.1.SP.F.0	700.049.7.1.SP.F.0	700.044.8.1.SP.F.0
8x8	9x9	10x10			
					
700.064.8.1.SP.F.0	700.081.9.1.SP.F.0	700.037.10.0.SP.F.0	700.064.10.0.SP.F.0	700.065.10.0.SP.F.0	700.068.10.0.SP.F.0
10x10			11x11		
					
700.084.10.0.SP.F.0	700.085.10.0.SP.F.0	700.100.10.1.SP.F.0	700.068.11.0.SP.F.0	700.069.11.0.SP.F.0	700.072.1.11.0.SP.F.0
11x11					
					
700.072.2.11.0.SP.F.0	700.073.1.11.0.SP.F.0	700.073.2.11.0.SP.F.0	700.076.11.0.SP.F.0	700.084.11.0.SP.F.0	700.085.1.11.0.SP.F.0
11x11			12x12		
					
700.085.2.11.1.SP.F.0	700.096.11.0.SP.F.0	700.097.11.0.SP.F.0	700.121.11.1.SP.F.0	700.108.12.0.SP.F.0	700.144.12.1.SP.F.0
13x13					
					
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SERIES 700,701

PGA / IC sockets / Grid array

2/3

13x13					
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13x13					
700.124.13.0.SP.F.0	700.128.13.0.SP.F.0	700.132.13.0.SP.F.0	700.132.13.1.SP.F.0	700.133.13.0.SP.F.0	700.144.13.0.SP.F.0
13x13		14x14			
700.145.13.0.SP.F.0	700.169.13.1.SP.F.0	700.095.14.0.SP.F.0	700.125.14.0.SP.F.0	700.132.14.0.SP.F.0	700.133.14.0.SP.F.0
14x14			15x15		
700.135.14.0.SP.F.0	700.181.14.0.SP.F.0	700.196.14.1.SP.F.0	700.144.15.0.SP.F.0	700.145.15.0.SP.F.0	700.145.15.1.SP.F.0
15x15					
700.149.1.15.0.SP.F.0	700.149.2.15.0.SP.F.0	700.153.15.0.SP.F.0	700.160.15.0.SP.F.0	700.175.15.1.SP.F.0	700.176.15.0.SP.F.0
15x15			16x16		
700.177.15.0.SP.F.0	700.179.15.0.SP.F.0	700.181.15.0.SP.F.0	700.225.15.1.SP.F.0	700.155.16.1.SP.F.0	700.156.16.0.SP.F.0

SERIES 700,701

PGA / IC sockets / Grid array

3/3

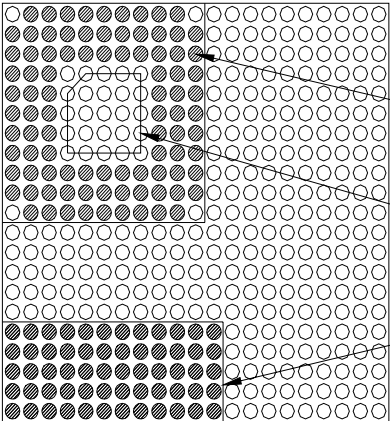
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17x17			18x18		
700.209.17.0.SP.F.0	700.288.17.1.SP.F.0	700.289.17.1.SP.F.0	700.155.18.0.SP.F.0	700.179.1.18.0.SP.F.0	700.179.2.18.0.SP.F.0
18x18					
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18x18	19x19				20x20
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20x20		21x21		33x33	
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DRAW YOUR OWN DESIGN

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
B	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
D	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
E	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
F	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
G	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
I	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
J	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
K	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
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M	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
O	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
P	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Q	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
R	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
T	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
U	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Customer				Series	
Address				(700 or 701)	
ZIP		City		Number of contacts	
Country				Number of rows	
Phone				Open or Closed	
Fax				Type of contact	
E-mail				(can be yours)	
				Pin plating option	
				Type of clip	
				(can be yours)	
				Clip plating option	

PGA 700,701



Mark positions where you want pins

Mark window

Odd shapes also possible

Fill in the holes where you want the contacts. If your request isn't standard, please send us a detailed drawing. For the very specific design, insulator is made in Epoxy, from 22x22 to 33x33.

SERIES 703,705

PGA / Sockets and Headers / Grid array /
Zig-zag / Surface mount

703
NP
1.
14
0
SP
F
0

Series

Number of contacts

Versions 1., 2., 3,...etc

(If there are the same number of
contacts and rows, see footprintst)

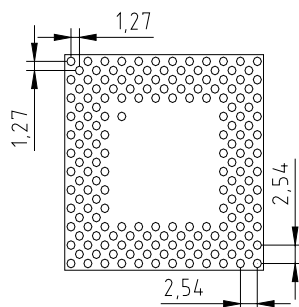
Number of rows (14x14)

Clip plating option

Pin plating option

Type of contact

0	Open window at center
1	Closed


703
705

Stand
offs

See footprints pages 75-76

Insulator: Glass filled thermoplastic, rated UL94V-0, PCT High temperature

Insulator: Epoxy FR-4

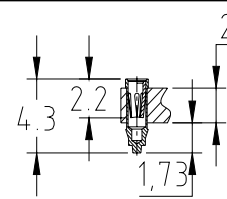
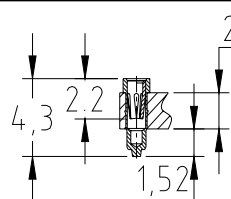
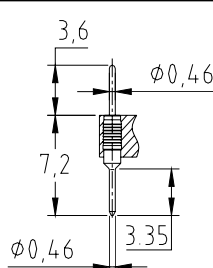
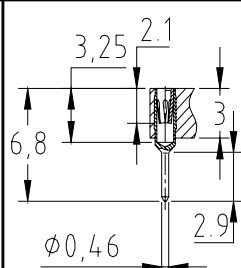
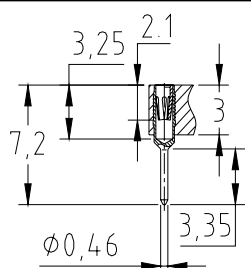
NC

NCS

ME

CCWT

CCST



Floating pin

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Inner spring contact SC6.UL	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.35-0.50 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.46 test pin Other forces available upon request.

SC6.UL

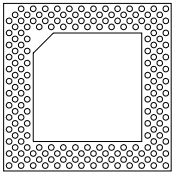
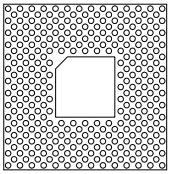
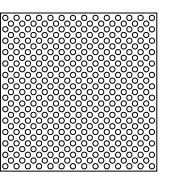
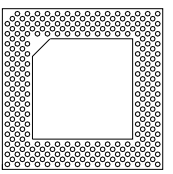
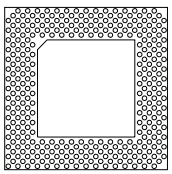
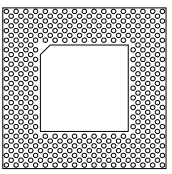
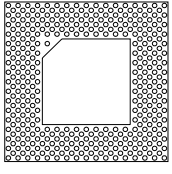
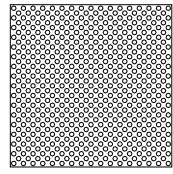
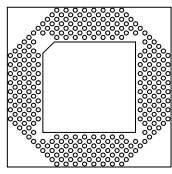
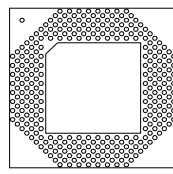
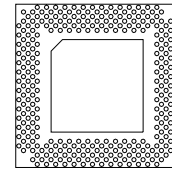
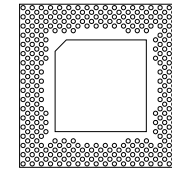
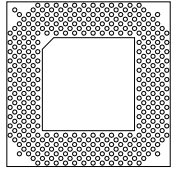
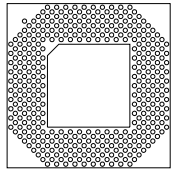
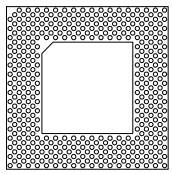
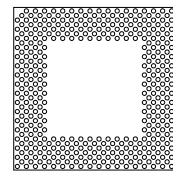
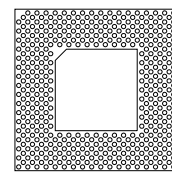
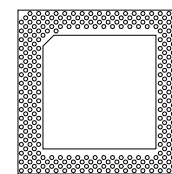
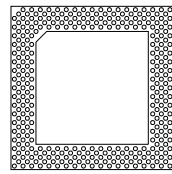
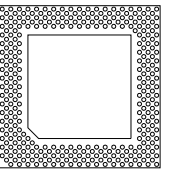
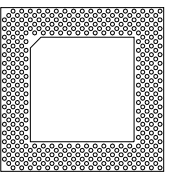
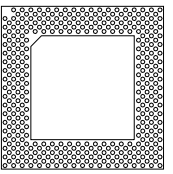
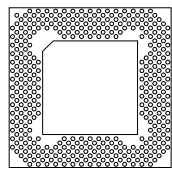
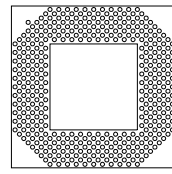
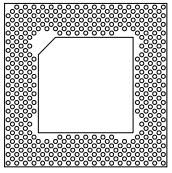
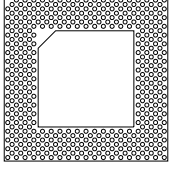
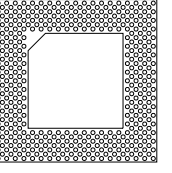
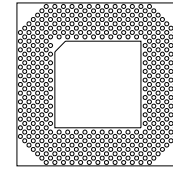
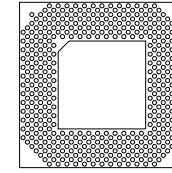
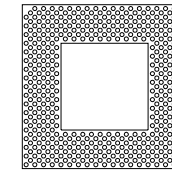
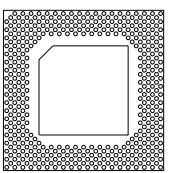
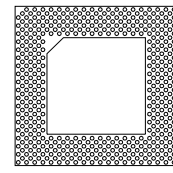
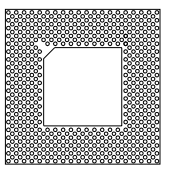
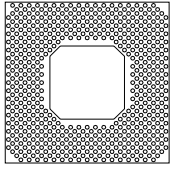
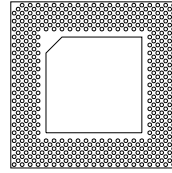
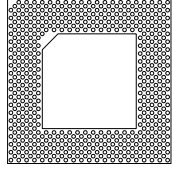
Insertion	20g max.
Extraction	5g min.

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	700 V _{RMS} min

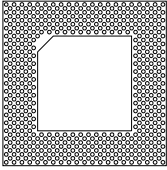
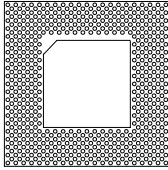
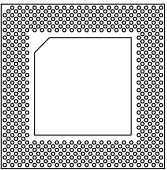
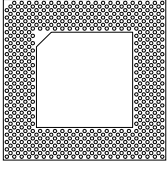
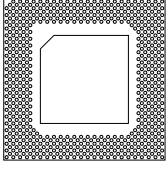
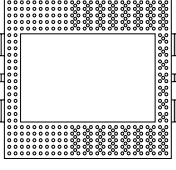
SERIES 703,705

PGA / Sockets and Headers / Grid array /
Zig-zag / Surface mount

14x14			16x16	17x17	
					
703.183.14.0.SP.F.0	703.304.14.0.SP.F.0	703.365.14.1.SP.F.0	703.299.16.0.SP.F.0	703.321.17.0.SP.F.0	703.364.17.0.SP.F.0
17x17		18x18			
					
703.365.17.0.SP.F.0	703.545.17.1.SP.F.0	703.280.18.0.SP.F.0	703.293.18.0.SP.F.0	703.305.18.0.SP.F.0	703.325.18.0.SP.F.0
18x18					19x19
					
703.361.18.0.SP.F.0	703.369.18.0.SP.F.0	703.391.18.0.SP.F.0	703.391.18.1.SP.F.0	703.431.18.0.SP.F.0	703.296.19.0.SP.F.0
19x19					
					
703.320.19.0.SP.F.0	703.321.19.0.SP.F.0	703.370.1.19.0.SP.F.0	703.370.2.19.0.SP.F.0	703.372.19.0.SP.F.0	703.401.19.0.SP.F.0
19x19					
					
703.403.19.0.SP.F.0	703.419.19.0.SP.F.0	703.420.19.0.SP.F.0	703.428.19.0.SP.F.0	703.429.19.0.SP.F.0	703.463.19.0.SP.F.0
20x20			21x21		
					
703.411.20.0.SP.F.0	703.447.20.0.SP.F.0	703.539.20.0.SP.F.0	703.557.20.0.SP.F.0	703.475.21.0.SP.F.0	703.528.21.0.SP.F.0

SERIES 703,705

PGA / Sockets and Headers / Grid array / Zig-zag / Surface mount

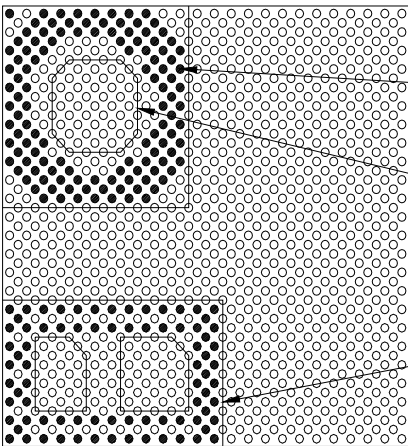
21x21		22x22		24x24	24x26
					
703.529.21.0.SP.F.0	703.565.20.0.SP.F.0	703.503.22.0.SP.F.0	703.559.22.0.SP.F.0	703.599.24.0.SP.F.0	703.387.24.0.SP.F.0

DRAW YOUR OWN DESIGN

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A																								
B																								
C																								
D																								
E																								
F																								
G																								
H																								
I																								
J																								
K																								
L																								
M																								
N																								
O																								
P																								
Q																								
R																								
S																								
T																								
U																								
V																								
W																								
X																								

Customer				Series	
Address				(703 or 705)	
ZIP		City		Number of contacts	
Country				Number of rows	
Phone				Open or Closed	
Fax				Type of contact	
E-mail				(can be yours)	
				Pin plating option	
				Type of clip	
				(can be yours)	
				Clip plating option	

PGA 703,705



Fill in the holes where you want the contacts. If your request isn't standard, please send us a detailed drawing. For the very specific design, insulator is made in Epoxy, from 24x24 to 33x33 and more.

SERIES 704

PGA / Sockets and Headers / Grid array /
Chip saver / 1.27mm spacing

704	.	NP	.	1.	.	31	.	0	.	SP	.	F	.	0
-----	---	----	---	----	---	----	---	---	---	----	---	---	---	---

Series. 709 for 1.5mm

Number of contacts

Versions 1., 2., 3.,...

(If there are the same number of contacts and rows, see footprints)

Number of rows (31x31)

Clip plating option

Pin plating option

Type of contact

0	Open window at center
1	Closed

A	n1 x 1.27
B	(n1 - 1) x 1.27
C	(n2 x 1.27) - 0.40

See footprints page 81

FH	TT
----	----

PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .2 0.50µm average Au
- .3 0.75µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Insulator body	Glass filled Epoxy FR-4
Inner spring contact SC3	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.35-0.50 or rectangular pin 0.25 x 0.45
Insertion / Extraction	Ø0.46 test pin Other forces available upon request.

SC3		SC4.SM	
Insertion	150g max.	Insertion	150g max.
Extraction	30g min.	Extraction	30g min.

ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	500 V _{RMS} min

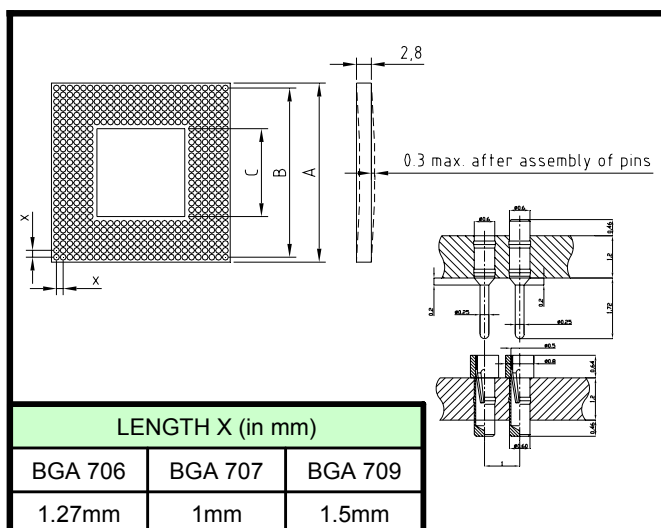
SERIES 706,707,709

BGA 1.27mm, 1mm or 1.5mm pitch /

Sockets and Adapter / Ball grid array

706	.	NP	.	1.	31	/31	.	0	.	SP	.	F	.	0					
Series 707 for 1mm 709 for 1.5mm		Insulator body FR-4 = . or FR-5 = H		Number of contacts		Versions 1., 2., 3.,... (If they are the same nbr of contacts and rows)		Number of rows (until 31x31)		Clip plating option		Pin plating option		<table border="1"> <tr> <td>BI BJ</td> <td>Adapter pin</td> </tr> <tr> <td>BK</td> <td>Socket pin</td> </tr> </table>		BI BJ	Adapter pin	BK	Socket pin
BI BJ	Adapter pin																		
BK	Socket pin																		
										<table border="1"> <tr> <td>0</td> <td>Open window at center</td> </tr> <tr> <td>1</td> <td>Closed</td> </tr> </table>		0	Open window at center	1	Closed	See footprints page 81			
0	Open window at center																		
1	Closed																		

BK	BI	BJ	FH	AD
Surface mount Accepted pin 0.2 to 0.3	Pluggable 0.25mm	Interconnect with surface Mount terminations 0.25mm		



PLATING OPTIONS

Sleeve (pin), change letter F (5.0µm standard Tin) by:

- .C 0.25µm gold plating
- .O gold flash
- .D tin / lead non-RoHS

Contact (clip), change suffix 0 (standard Au 24c flash) by:

- .1 0.25µm average Au
- .4 0.75µm minimum 24c Au (MIL STD)
- .6 5.0µm tin
- .00 5.0µm tin / lead non-RoHS

TECHNICAL DATA

Temperature range	-55°C to +125°C
Outer shell (sleeve)	Screw machined Brass CuZn36Pb3 (C36000)
Insulator body	Glass filled Epoxy FR-4 or FR-5 = High temperature (order with H front NP)
Inner spring contact SC3.015	Stamped and formed BeCu (C17200) gold or tin plated, accepts Ø0.2-0.3 or rectangular pin 0.15 x 0.25
Insertion / Extraction	Ø0.20 test pin Other forces available upon request.

SC3.015

Insertion	30g max.
Extraction	10g min.

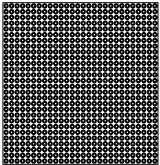
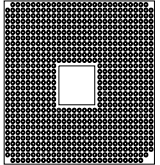
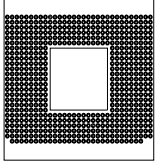
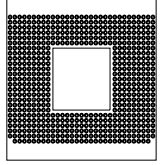
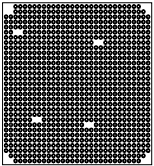
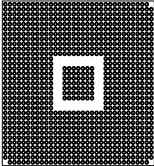
ELECTRICAL DATA

Rated current	1A
Maxi working voltage	100V _{RMS} / 150 V _{dc}
Contact resistance	10 mΩ max
Dielectric strength	500 V _{RMS} min

SERIES 704,706,707

PGA and BGA / Sockets and Headers /

Grid array / Chip saver / 1.27mm spacing

26x26		28x28	29x29	31x31	
					
704.478.26.0.SP.F.0	704.479.26.0.SP.F.0	704.700.28.1.SP.F.0	704.754.29.0.SP.F.0	704.603.31.0.SP.F.0	704.604.31.0.SP.F.0
31x31	33x33				
					
704.940.31.0.SP.F.0	704.1014.33.1.SP.F.0				

Other PGA gold BGA available on request.

Please draw your request on the following page or contact the customer service.

DRAW YOUR OWN DESIGN

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z
AA
AB
AC
AD
AE
AF
AG

Customer

Address

ZIP

City

Country

Phone

Fax

E-mail

Series
(704, 706, 707 or 709)

Number of contacts

Number of rows

Open or Closed

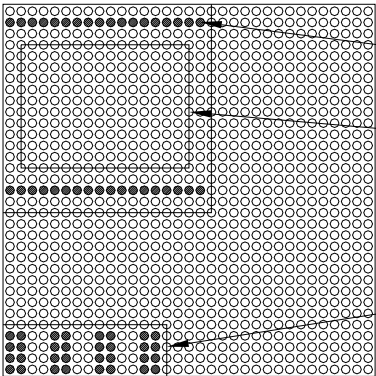
Type of contact
(can be yours)

Pin plating option

Type of clip
(can be yours)

Clip plating option

BGA 704 and PGA 706,707,709



Mark positions where you want pins

Mark window

Odd shapes also possible

Fill in the holes where you want the contacts. If your request isn't standard, please send us a detailed drawing. For the very specific design, insulator is made in Epoxy, from 14x14 to 35x35 and more.

All Clips produced from BeCu(C17200) Alloy 172 1/2 HD and heat treated after forming.												
Outside diameter A	Operating range diameter	Overall length mm B	Test pin diameter	Max. Insert. force grames	Withdrawal force grames		Min. mating pin length.	Min diameter Contact body E	Current rating	Number of fingers	Part number	Catalog reference
					MAXI	MINI						
0.5	0.15-0.28	1.35	0.2	30		10	1.60	0.70		3	SC3.015	Q
0.6	0.18-0.33	1.65	0.28	30		9	1.80	0.80		3	SC3.018	R
0.71	0.30-0.43	1.52	0.38	250		42	1.70	0.90	1A	6	SC6.03	S
0.79	0.30-0.48	1.52	0.38	60		15	1.70	1.00	1A	6	SC6.03L	T
0.81	0.35-0.5	1.9	0.46	140		35	2.10	1.00	2A	3	SC3	F
0.81	0.35-0.5	1.9	0.46	60		20	2.10	1.00	2A	3	SC3.L	G
0.81	0.35-0.5	1.7	0.46	145		30	1.90	1.00	2A	4	SC4.SM	E
1.11	0.40-0.56	2.1	0.43	320		50	2.70	1.40	3A	4	SC4	A
1.11	0.40-0.56	1.6	0.43	350		100	1.80	1.40	3A	4	SC4.SH	D
1.11	0.40-0.56	2.1	0.46	35		15	2.70	1.40	3A	4	SC4.SL	L
1.11	0.40-0.56	2.1	0.46	50		20	2.70	1.40	3A	4	SC4.VLI	M
1.11	0.40-0.56	2.1	0.46	15		5	2.70	1.40	3A	6	SC6.UL	H
1.11	0.40-0.56	2.1	0.46	50		20	2.70	1.40	3A	6	SC6.VLI	B
1.27	0.64-0.89	2.1	0.66	140		25	2.65	1.43	4A	6	SC6.065L	U
1.35	0.56-0.81	2.97	I-0,6 W-0,61	385		50	3.05	1.70	5A	4	SC4.056	CA
1.32	0.65-0.85	2	0.66	100		30	2.60	1.43	5A	6	SC6.065	C
1.32	0.65-0.85	2	0.66	375		100	2.60	1.43	5H	6	SC6.065H	V
1.39	0.94-1.1	1.65	1.01	160		50	2.00	1.80	8A	6	SC6.094	I
1.63	0.81-1.15	3.05	I-1,01 W-0,89	1020		110	3.30	1.90	8A	4	SC4.081H	
1.63	0.81-1.15	3.05	1.01	2270		200	3.30	1.90	8A	4	SC4.081SH	
1.63	0.81-1.17	3.05	0.99	420		140	3.60	1.90	8A	4	SC4.081	
1.75	0.91-1.27	3.81	1,01 0,76	325 55		60 15	3.95	2.00	8A	4	SC4.091	
1.73	1,01-1,27	2.16	1.015	300		75	2.30	1.90	8A	6	SC6.101	
2.03	1,01-1,5	3.81	I-1,27 W-1,01	375		35	3.95	2.30	10A	4	SC4.101	
2.23	1,21-1.62	3.15	I-1,524 W-1,27	400		60	3.40	2.60	11A	4	SC4.121	O
2.23	1,21-1.62	3.15	1.56		200	57	3.40	2.60	11A	4	SC4.121L	
2.75	1,65-2,08	3.75	I-1,88 W-1,83	1360		230	3.95	3.10	15A	4	SC4.165	OL
2.75	1,65-2,08	3.75	2	700		250	3.95		15A	4	SC4.165.L	P
3.14	2,13-2,6	3	2.36	600		150	3.15	3.60	15A	6	SC6.213	OA

This list is not exhaustive. You can find other stamped or screw-machined clips by asking the Customer service.

SERIES 2002,2022,2502

SPRING-LOADED / 2.54mm / Grid /
Single and Double row / Surface mount

For other POGO PINS, please contact the customer service.

PP		
2002	2022	2502

AVAILABLE CONNECTOR HEIGHTS

Type	Initial Height A (mm)	Stroke (mm)	Plastic Body Height B (mm)	LP
2502	4.5	1.15	2.95	4.5
2502	5	1.4	2.95	5
2502	5.5	1.4	2.95	5.5
2002 / 2022	6	1.4	4	6
2002 / 2022	6.5	1.4	4	6.5
2002 / 2022	7	1.4	4	7
2002 / 2022	7.5	1.4	4	7.5

Available with Positioning options
(see GUIDE AND PAD description page 29)

Pin style		PP
TYPE	NP Nbr PIN	ORDERING NUMBERS
2002	2 to 10	2002HNP.PP.LP.II
2022	4 to 20	2022HNP.PP.LP.II
2502	2 to 10	2502HNP.PP.LP.II

PLATING OPTIONS

➤ .II 0.5µm gold plating (barrel and piston)

TECHNICAL DATA

Temperature range	-55°C to +125°C
Insulator body	Glass filled thermoplastic polyester, self-extinguishing, rated UL94V-0 PCT = high temperature
Barrel and Piston	Screw machined Brass CuZn36Pb3 (C36000)
Spring	Stainless steel X12 CrNi177, DIN 17224
Max. stroke	1.4mm
Forces	0.25 N initial / 0.6 N at ½ stroke
Mechanical life	100'000 cycles
Examples PN	2002H02.PP.6.II or 2502H10.PP.5.II

ELECTRICAL DATA

Operating current	3.5A max
Contact resistance	15 mΩ (static measurement, alway position)