

Series image - Reference only

EU RoHS

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ELV and RoHS Compliant



Lead-free Process Capability SMC & Wave Capable (TH only)  
Process Temperature max. C260

**Search Parts in this Series**

70280 Series

**Part Number:** 0010897262

**Status:** Active

**Description:** 2.54mm (.100") Pitch C-Grid Breakaway Header, Dual Row, Vertical, High Temperature, 26 Circuits, 0.38 $\mu$ m (15 $\mu$ ) Gold (Au) Selective Plating, Tin (Sn) PC Tail Plating, 2.72mm (.107") PC Tail

**Documents:**

- [Drawing \(PDF\)](#)
- [Product Specification PS-70280 \(PDF\)](#)
- [3D Model](#)
- [Related Catalog Page \(PDF\)](#)

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**Part Detail:** [\(show all\)](#)

○	<b>General</b>
○	<b>Physical</b>
○	<b>Electrical</b>
○	<b>Material Info</b>
○	<b>Reference - Drawing Numbers</b>

### General

Product Family	PCB Headers
Series	<u>70280</u>
Application	Board-to-Board
Application	Wire-to-Board
Product Name	C-Grid®

### Physical

Breakaway	Yes
Circuits (Loaded)	26
Circuits (maximum)	26
Color - Resin	Black
Durability (mating cycles) min	50 cycles
First Mate / Last Break	No
Flammability	94V-0
Guide to Mating Part	No
Keying to mating part	None
Lock to Mating Part	None
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Vertical
PC Tail Length (in)	0.110 In
PC Tail Length (mm)	2.79 mm
PCB Locator	No
PCB Retention	None
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Bag
Pitch - Mating Interface (in)	0.100 In
Pitch - Mating Interface (mm)	2.54 mm
Plating min: Mating (uin)	15.2
Plating min: Mating (um)	0.38
Plating min: Termination (uin)	80
Plating min: Termination (um)	2
Polarized to Mating Part	No
Polarized to PCB	No

Robotic Placement	None
Shrouded	No
Stackable	Yes
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole

### Electrical

CSA	LR19980
Current - Maximum	3.000 Amp
UL	E29179
Voltage - Maximum	250V

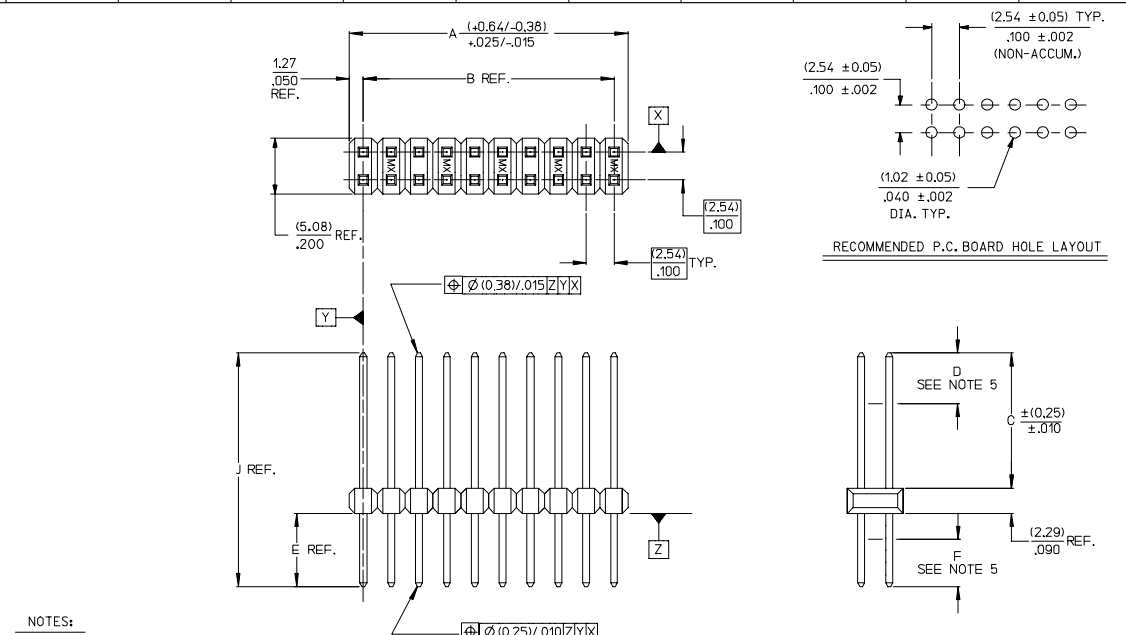
### Material Info

Old Part Number	70280-0053
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### Reference - Drawing Numbers

Product Specification	PS-70280
Sales Drawing	SDA-70280-0001-4000

CKT. SIZE	DIM. A REF.		DIM. B REF.	
	(MM)	(INCH)	(MM)	(INCH)
J	4	(5.08)	.200	(2.54)
	6	(7.62)	.300	(5.08)
	8	(10.16)	.400	(7.62)
	10	(12.70)	.500	(10.16)
	12	(15.24)	.600	(12.70)
	14	(17.78)	.700	(15.24)
I	16	(20.32)	.800	(17.78)
	18	(22.86)	.900	(20.32)
	20	(25.40)	1.000	(22.86)
	22	(27.94)	1.100	(25.40)
	24	(30.48)	1.200	(27.94)
	26	(33.02)	1.300	(30.48)
	28	(35.56)	1.400	(33.02)
H	30	(38.10)	1.500	(35.56)
	32	(40.64)	1.600	(38.10)
	34	(43.18)	1.700	(40.64)
	36	(45.72)	1.800	(43.18)
	38	(48.26)	1.900	(45.72)
	40	(50.80)	2.000	(48.26)
G	42	(53.34)	2.100	(50.80)
	44	(55.88)	2.200	(53.34)
	46	(58.42)	2.300	(55.88)
	48	(60.96)	2.400	(58.42)
	50	(63.50)	2.500	(60.96)
	52	(66.04)	2.600	(63.50)
F	54	(68.58)	2.700	(66.04)
	56	(71.12)	2.800	(68.58)
	58	(73.66)	2.900	(71.12)
	60	(76.20)	3.000	(73.66)
	62	(78.74)	3.100	(76.20)
	64	(81.28)	3.200	(78.74)
E	66	(83.82)	3.300	(81.28)
	68	(86.36)	3.400	(83.82)
	70	(88.90)	3.500	(86.36)
	72	(91.44)	3.600	(88.90)
	74	(93.98)	3.700	(91.44)
	76	(96.52)	3.800	(93.98)
D	78	(99.06)	3.900	(96.52)
	80	(101.60)	4.000	(99.06)
	82	(104.14)	4.100	(101.60)
	84	(106.68)	4.200	(104.14)
	86	(109.22)	4.300	(106.68)
	88	(111.76)	4.400	(109.22)
C	90	(114.30)	4.500	(111.76)
	92	(116.84)	4.600	(114.30)
	94	(119.38)	4.700	(116.84)
	96	(121.92)	4.800	(119.38)
	98	(124.46)	4.900	(121.92)
	100	(127.00)	5.000	(124.46)



**NOTES:**

- MATERIAL:  
PIN: COPPER ALLOY  
WAFER: GLASS FILLED LCP (LIQUID CRYSTAL POLYMER, UL 94V-0, COLOR: BLACK.
- FINISH:  
TIN = (0.00380)/0.000150 MINIMUM TIN PLATE OVER (0.00127)/0.000050 MINIMUM NICKEL PLATE.  
15 GOLD = (0.00038)/0.000015 MINIMUM GOLD PLATE IN SELECT AREA, (0.00190)/0.000075 MINIMUM TIN PLATE IN SELECT AREA, OVER (0.00127)/0.000050 MINIMUM NICKEL PLATE OVERALL.  
30 GOLD = (0.00076)/0.000030 MINIMUM GOLD PLATE IN SELECT AREA, (0.00190)/0.000075 MINIMUM TIN PLATE IN SELECT AREA, OVER (0.00127)/0.000050 MINIMUM NICKEL PLATE OVERALL.  
GT15 = (0.00038)/0.000015 MINIMUM GOLD PLATE IN SELECT AREA, (0.00254)/0.000100 MINIMUM TIN PLATE IN SELECT AREA, OVER (0.00127)/0.000050 MINIMUM NICKEL PLATE OVERALL.
- PRODUCT SPECIFICATION: NONE
- PACKAGING INFORMATION: (UNLESS OTHERWISE NOTED IN TABLES) BULK PACK PER PK-70873-0353.
- MEASURE POINT FOR PLATING THICKNESS.
- FOR ASSEMBLIES WITH VOIDED PINS, REFER TO DRAWING NO. SDA-70280-5001-9999.
- PIN PUSHOUT FORCE: 3 POUNDS MINIMUM IN EITHER DIRECTION.
- FOR ILLUSTRATION PURPOSES, 20 (DUAL 10) CIRCUIT SIZE IS SHOWN.
- PINS MEET SOLDERABILITY SPEC SMES-152. ABSENCE OF PLATING PERMISSIBLE AT BANDOLIER PIN FAYING SURFACE. (APPROXIMATELY (0.64)/0.025 INCH LONG BY (0.151)/0.006 INCH WIDE AT 2 LOCATIONS)
- PARTS CONFORM TO CLASS B OF COSMETIC SPECIFICATION PS-45499-002

\* THE PRIMARY SHIPPING CARTON WILL BE LABELED 'COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC'. CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD PLATING.

8	G5
7	G3
6	G3
5	G3
4	G3
3	G3
2	G3
1	G5

ADD P/N 70280-1218 EC NO: UCP2008-0305 DRAWN BY: G5 CHKD BY: JEBELL APPROV: SMITH REV: 2007/08/14 2007/08/14 2007/08/14	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM/IN	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± .13 ± .01 1 PLACE ± 0.25 ± --- ANGULAR ±1/2°	DRAWN BY: SMR DATE: 04/19/1993 CHECKED BY: SMR DATE: 04/19/1993 APPROVED BY: SMR DATE: 04/19/1993	TITLE SALES ASSY-HIGH TEMP. DUAL ROW WAFER W/BREAK-OFF OPT. .025 SQ PINS	MATERIAL NO. SEE TABLE	DOCUMENT NO. SDA-70280-0001-4000

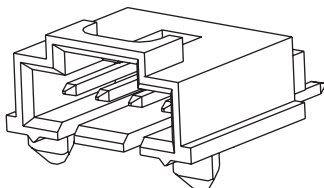
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



# 2.54mm (.100") Pitch SL™ Wire-to-Board Shrouded Header

## 70634 Single Row, .120" Pocket Right Angle, Low Profile SMT with Tri Peg



### Features and Benefits

- Sizes 2 to 25 circuits
- Press-fit peg maximizes retention to PCB during soldering process
- Locking crown secures positive latch to header
- Standoffs minimize flux interference

### Reference Information

Product Specification: PS-70541  
Packaging: Tube  
UL File No.: E29179  
CSA File No.: LR19980  
Mates with: 70066G, 70066N, 70400G and 70430G  
Designed in: Inches

### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 15 milliohms max.  
Dielectric Withstanding Voltage: 1500V  
Insulation Resistance: 10,000 Megohms min.

### Mechanical

Insertion force to PCB: 44.48N (10 lbs.)  
Durability: Tin — 25 cycles; Gold — 50 cycles

### Physical

Housing: Black polyester, UL 94V-0  
Contact: Copper Alloy  
Operating Temperature: -40 to +105°C

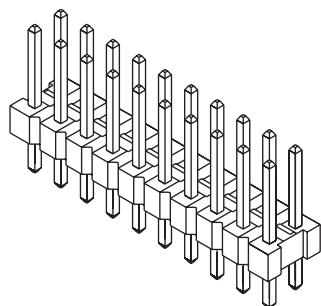
Circuits	Order No.			Lead-free
	Tin	15µm Gold	30µm Gold	
2	<a href="#">15-91-3024</a>	<a href="#">15-91-2025</a>	<a href="#">15-91-3023</a>	Yes
3	<a href="#">15-91-3034</a>	<a href="#">15-91-2035</a>	<a href="#">15-91-3033</a>	
4	<a href="#">15-91-3044</a>	<a href="#">15-91-2045</a>	<a href="#">15-91-3043</a>	
5	<a href="#">15-91-3054</a>	<a href="#">15-91-2055</a>	<a href="#">15-91-3053</a>	
6	<a href="#">15-91-3064</a>	<a href="#">15-91-2065</a>	<a href="#">15-91-3063</a>	
7	<a href="#">15-91-3074</a>	<a href="#">15-91-2075</a>	<a href="#">15-91-3073</a>	
8	<a href="#">15-91-3084</a>	<a href="#">15-91-2085</a>	<a href="#">15-91-3083</a>	
9	<a href="#">15-91-3094</a>	<a href="#">15-91-2095</a>	<a href="#">15-91-3093</a>	
10	<a href="#">15-91-3104</a>	<a href="#">15-91-2105</a>	<a href="#">15-91-3103</a>	
11	<a href="#">15-91-3114</a>	<a href="#">15-91-2115</a>	<a href="#">15-91-3113</a>	
12	<a href="#">15-91-3124</a>	<a href="#">15-91-2125</a>	<a href="#">15-91-3123</a>	
13	<a href="#">15-91-3134</a>	<a href="#">15-91-2135</a>	<a href="#">15-91-3133</a>	

Circuits	Order No.			Lead-free
	Tin	15µm Gold	30µm Gold	
14	<a href="#">15-91-3144</a>	<a href="#">15-91-2145</a>	<a href="#">15-91-3143</a>	Yes
15	<a href="#">15-91-3154</a>	<a href="#">15-91-2155</a>	<a href="#">15-91-3153</a>	
16	<a href="#">15-91-3164</a>	<a href="#">15-91-2165</a>	<a href="#">15-91-3163</a>	
17	<a href="#">15-91-3174</a>	<a href="#">15-91-2175</a>	<a href="#">15-91-3173</a>	
18	<a href="#">15-91-3184</a>	<a href="#">15-91-2185</a>	<a href="#">15-91-3183</a>	
19	<a href="#">15-91-3194</a>	<a href="#">15-91-2195</a>	<a href="#">15-91-3193</a>	
20	<a href="#">15-91-3204</a>	<a href="#">15-91-2205</a>	<a href="#">15-91-3203</a>	
21	<a href="#">15-91-3214</a>	<a href="#">15-91-2215</a>	<a href="#">15-91-3213</a>	
22	<a href="#">15-91-3224</a>	<a href="#">15-91-2225</a>	<a href="#">15-91-3223</a>	
23	<a href="#">15-91-3234</a>	<a href="#">15-91-2235</a>	<a href="#">15-91-3233</a>	
24	<a href="#">15-91-3244</a>	<a href="#">15-91-2245</a>	<a href="#">15-91-3243</a>	
25	<a href="#">15-91-3254</a>	<a href="#">15-91-2255</a>	<a href="#">15-91-3253</a>	

[www.molex.com/product/sl\\_products.html](http://www.molex.com/product/sl_products.html)

# 2.54mm (.100") Pitch C-Grid® Breakaway Header

## 70280 Dual Row, Vertical High-Temperature



### Features and Benefits

- Sizes 4 to 100 circuits
- Stackable side-to-side and end-to-end (on unbroken edges)
- Easy breakaway to smaller sizes
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

### Reference Information

Product Specifications: PS-70280  
Packaging: Bag  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 7859 Shunts, C-Grid Receptacles, SL Crimp, FFC and IDT Housings  
Designed In: Inches

### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 15 milliohms max.  
Dielectric Withstanding Voltage: 1500V  
Insulation Resistance: 1000 Megohms min.

### Mechanical

Pin Retention to Header: 17.79N (4 lb)  
Durability: Tin—25 cycles; Gold—50 cycles

### Physical

Housing: Black high-temperature thermal plastic, UL 94V-0  
Contact: Copper Alloy  
Plating: See Table  
Operating Temperature: -40 to +105°C

### Not For Use With Molex C-Grid III™ Components

Plating Option	Order No.	Lead-free
150µm Tin	10-89-7XX1	Yes
15µm Gold	10-89-7XX2	
30µm Gold	10-89-7XX0	

Replace XX with no. of circuits, 04-80 (even only). See sales drawing for 82-100.

[www.molex.com/product/cgrid/cgrid.html](http://www.molex.com/product/cgrid/cgrid.html)



MX07 C-27

C  
2.54mm (.100") Pitch PCB and Wire Connectors