

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0010897121](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch C-Grid® Breakaway Header, Dual Row, Vertical, High Temperature, 12 Circuits, Tin (Sn) Plating, 2.72mm (.107") PC Tail Length

**Documents:**

[3D Model](#) [Product Specification PS-70280 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

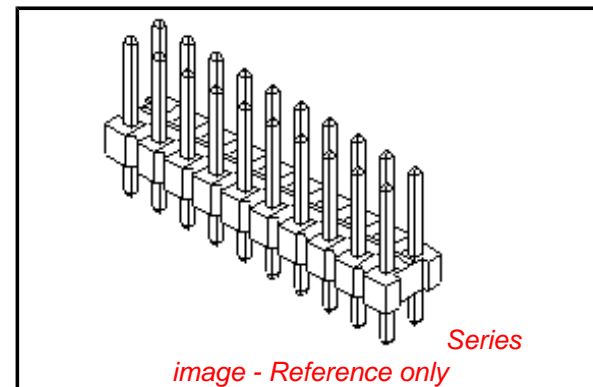
CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [70280](#)  
 Application Board-to-Board, Wire-to-Board  
 Product Name C-Grid®

**Physical**

Breakaway Yes  
 Circuits (Loaded) 12  
 Circuits (maximum) 12  
 Color - Resin Black  
 Durability (mating cycles max) 25  
 First Mate / Last Break No  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part No  
 Keying to Mating Part None  
 Lock to Mating Part None  
 Material - Metal Copper Alloy  
 Material - Plating Mating Tin  
 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 (µin) 152.4  
 Plating min: Mating (µm) 3.81  
 Plating min: Termination (µin) 152.4  
 Plating min: Termination (µm) 3.81  
 Polarized to Mating Part No  
 Polarized to PCB No  
 Shrouded No  
 Stackable Yes  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style Through Hole



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free Status**  
**Not Reviewed**

**China RoHS**



**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[70280Series](#)

**Electrical**

Current - Maximum per Contact 3A  
Voltage - Maximum 250V

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 30  
Lead-free Process Capability SMC & Wave Capable (TH only)  
Max. Cycles at Max. Process Temperature 3  
Process Temperature max. C 245

**Material Info**

Old Part Number 70280-0006

**Reference - Drawing Numbers**

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

This document was generated on 03/29/2010

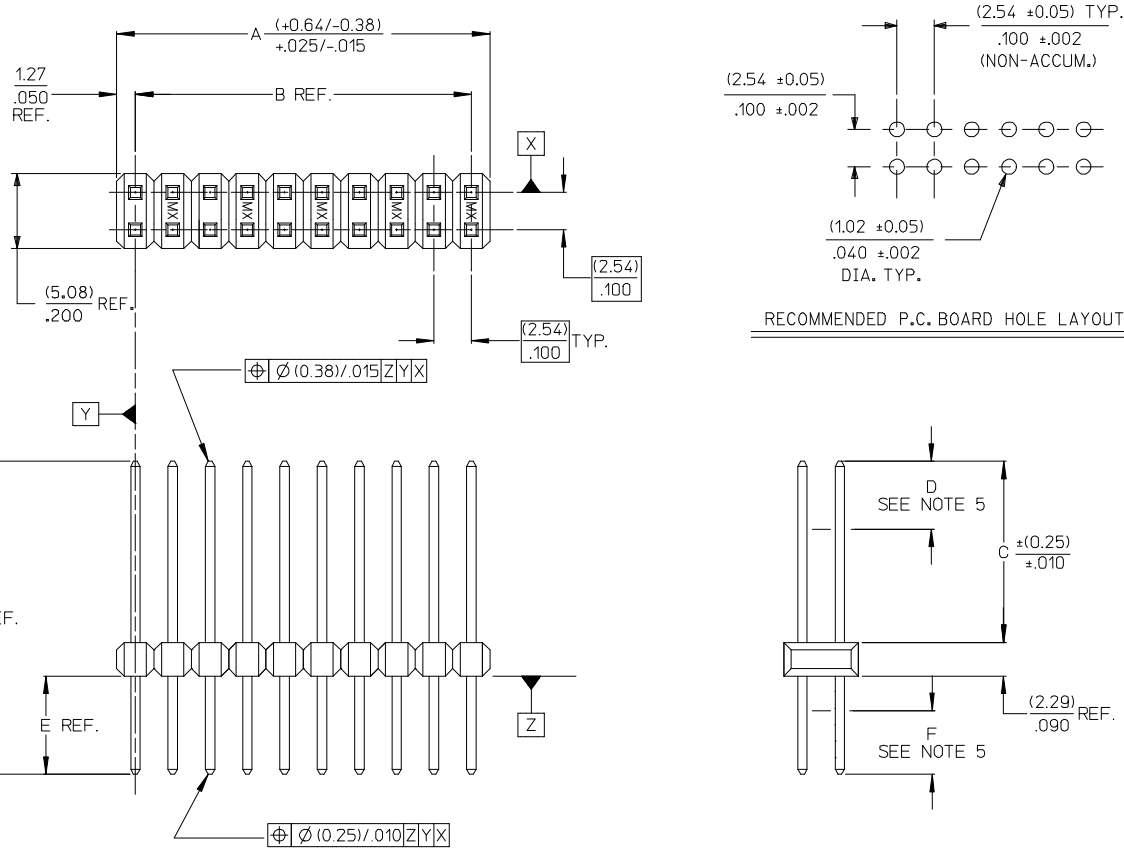
**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

CKT. SIZE	DIM. A REF.		DIM. B REF.		
	(MM)	INCH	(MM)	INCH	
J	4	(5.08)	.200	(2.54)	.100
	6	(7.62)	.300	(5.08)	.200
	8	(10.16)	.400	(7.62)	.300
	10	(12.70)	.500	(10.16)	.400
	12	(15.24)	.600	(12.70)	.500
	14	(17.78)	.700	(15.24)	.600
I	16	(20.32)	.800	(17.78)	.700
	18	(22.86)	.900	(20.32)	.800
	20	(25.40)	1.000	(22.86)	.900
	22	(27.94)	1.100	(25.40)	1.000
	24	(30.48)	1.200	(27.94)	1.100
	26	(33.02)	1.300	(30.48)	1.200
	28	(35.56)	1.400	(33.02)	1.300
H	30	(38.10)	1.500	(35.56)	1.400
	32	(40.64)	1.600	(38.10)	1.500
	34	(43.18)	1.700	(40.64)	1.600
	36	(45.72)	1.800	(43.18)	1.700
	38	(48.26)	1.900	(45.72)	1.800
	40	(50.80)	2.000	(48.26)	1.900
G	42	(53.34)	2.100	(50.80)	2.000
	44	(55.88)	2.200	(53.34)	2.100
	46	(58.42)	2.300	(55.88)	2.200
	48	(60.96)	2.400	(58.42)	2.300
	50	(63.50)	2.500	(60.96)	2.400
	52	(66.04)	2.600	(63.50)	2.500
	54	(68.58)	2.700	(66.04)	2.600
F	56	(71.12)	2.800	(68.58)	2.700
	58	(73.66)	2.900	(71.12)	2.800
	60	(76.20)	3.000	(73.66)	2.900
	62	(78.74)	3.100	(76.20)	3.000
	64	(81.28)	3.200	(78.74)	3.100
	66	(83.82)	3.300	(81.28)	3.200
E	68	(86.36)	3.400	(83.82)	3.300
	70	(88.90)	3.500	(86.36)	3.400
	72	(91.44)	3.600	(88.90)	3.500
	74	(93.98)	3.700	(91.44)	3.600
	76	(96.52)	3.800	(93.98)	3.700
	78	(99.06)	3.900	(96.52)	3.800
D	80	(101.06)	4.000	(99.06)	3.900
	82	(104.14)	4.100	(101.06)	4.000
	84	(106.68)	4.200	(104.14)	4.100
	86	(109.22)	4.300	(106.68)	4.200
	88	(111.76)	4.400	(109.22)	4.300
	90	(114.30)	4.500	(111.76)	4.400
	92	(116.84)	4.600	(114.30)	4.500
C	94	(119.38)	4.700	(116.84)	4.600
	96	(121.92)	4.800	(119.38)	4.700
	98	(124.46)	4.900	(121.92)	4.800
	100	(127.00)	5.000	(124.46)	4.900

**NOTES:**

- MATERIAL:  
PIN: COPPER ALLOY  
WAFER: GLASS FILLED LCP (LIQUID CRYSTAL POLYMER, UL 94V-0, COLOR: BLACK.
- FINISH:  
TIN = (0.00380)/.000150 MINIMUM TIN PLATE OVER (0.00127)/.000050 MINIMUM NICKEL PLATE.  
15 GOLD = (0.00038)/.000015 MINIMUM GOLD PLATE IN SELECT AREA, (0.00190)/.000075 MINIMUM TIN PLATE IN SELECT AREA, OVER (0.00127)/.000050 MINIMUM NICKEL PLATE OVERALL.  
30 GOLD = (0.00076)/.000030 MINIMUM GOLD PLATE IN SELECT AREA, (0.00190)/.000075 MINIMUM TIN PLATE IN SELECT AREA, OVER (0.00127)/.000050 MINIMUM NICKEL PLATE OVERALL.  
GT15 = (0.00038)/.000015 MINIMUM GOLD PLATE IN SELECT AREA, (0.00254)/.000100 MINIMUM TIN PLATE IN SELECT AREA, OVER (0.00127)/.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)/.025 INCH LONG BY (0.15)/.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.



ADD P/N 70280-1254 EC NO: UCP2008-2306 DRWN:JBELL 2008/03/31 CHKD:LSCHMIDT 2008/04/07 APPR:FSM/TH 2008/04/24	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		± mm	± INCH	DRAWN BY SMR	DATE 04/19/1993	TITLE SALES ASSY-HIGH TEMP. DUAL ROW WAFER W/BREAK-OFF OPT. .025 SQ PINS	
G6	REV	4 PLACES ± --- ± ---	3 PLACES ± --- ± .005	CHECKED BY	DATE	MOLEX INCORPORATED	SHEET NO. 1 OF 9
		2 PLACES ± .013 ± .01	1 PLACE ± 0.25 ± ---	APPROVED BY SMR	DATE 04/19/1993		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SDA-70280-0001-4000		SHEET NO. 1 OF 9	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

