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Part Number: [0010897321](#)
Status: **Active**
Description: 2.54mm (.100") Pitch C-Grid® Breakaway Header, Dual Row, Vertical, High Temperature, 32 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) 32
 Circuits (maximum) 32
 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

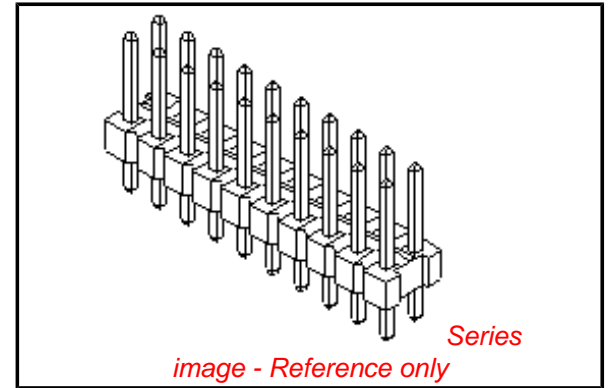


image - Reference only

EU RoHS

ELV and RoHS Compliant
REACH SVHC
 Not Reviewed
Halogen-Free Status
Not Reviewed

China RoHS



Need more information on product environmental compliance?

Email 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) 5
Lead-free Process Capability SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature 1
Process Temperature max. C 260

Material Info

Old Part Number 70280-0016

Reference - Drawing Numbers

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

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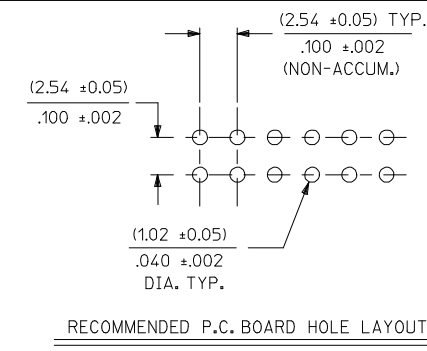
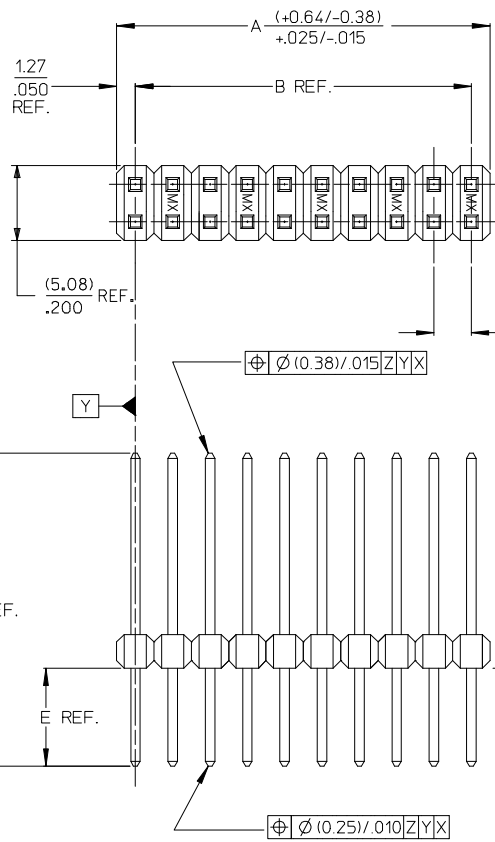
CKT. SIZE	DIM. A REF.		DIM. B REF.		
	(MM)	INCH	(MM)	INCH	
J	4	(5.08)	.200	(2.54)	.100
	6	(7.62)	.300	(5.08)	.200
	8	(10.16)	.400	(7.62)	.300
	10	(12.70)	.500	(10.16)	.400
	12	(15.24)	.600	(12.70)	.500
	14	(17.78)	.700	(15.24)	.600
I	16	(20.32)	.800	(17.78)	.700
	18	(22.86)	.900	(20.32)	.800
	20	(25.40)	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.



RECOMMENDED P.C. BOARD HOLE LAYOUT

9	G6
8	G5
7	G3
6	G3
5	G3
4	G3
3	G3
2	G3
1	G6
SHT. REV.	

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

