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Part Number: [0010897481](#)
Status: **Active**
Description: 2.54mm (.100") Pitch C-Grid® Breakaway Header, Dual Row, Vertical, High Temperature, 48 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

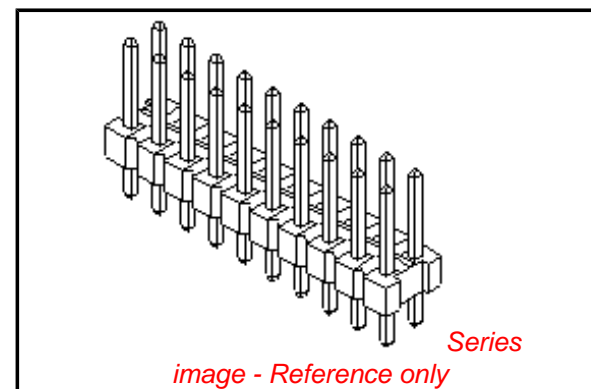
CSA LR19980
 UL E29179

General

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

Physical

Breakaway Yes
 Circuits (Loaded) 48
 Circuits (maximum) 48
 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
 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

Lead-free Process Capability SMC & Wave Capable (TH only)
Process Temperature max. C 260

Material Info

Old Part Number 70280-0024

Reference - Drawing Numbers

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

This document was generated on 03/29/2010

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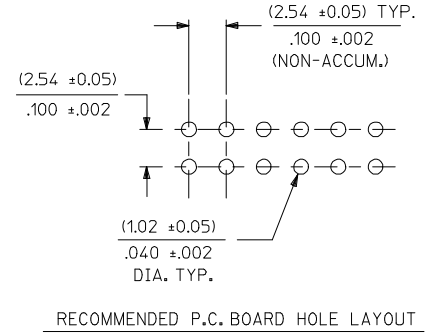
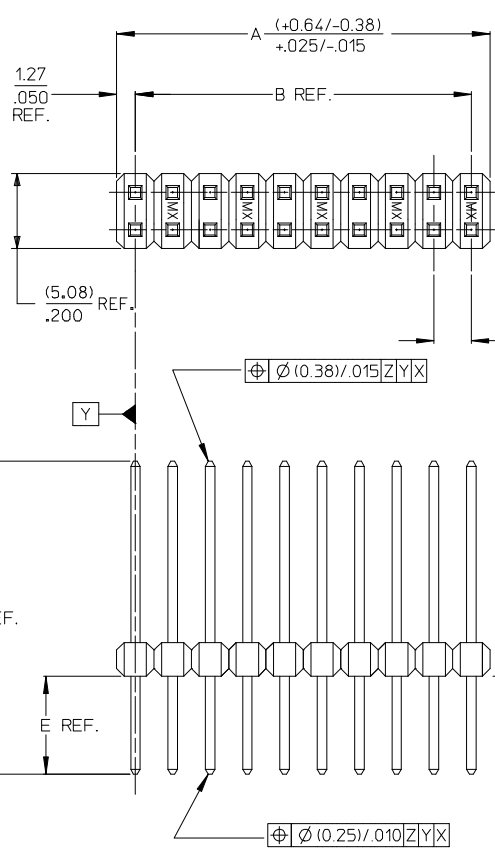
| CKT. SIZE | DIM. A REF. | | DIM. B REF. | | |
|-----------|-------------|----------|-------------|----------|-------|
| | (MM) | INCH | (MM) | INCH | |
| J | 4 | (5.08) | .200 | (2.54) | .100 |
| | 6 | (7.62) | .300 | (5.08) | .200 |
| | 8 | (10.16) | .400 | (7.62) | .300 |
| | 10 | (12.70) | .500 | (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:

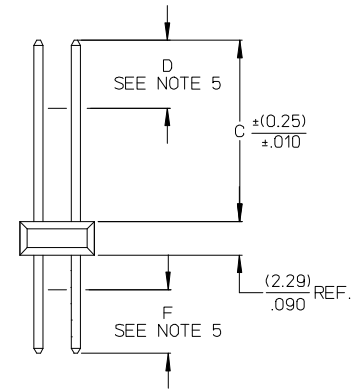
- MATERIAL:
PIN: COPPER ALLOY
WAFER: GLASS FILLED LCP (LIQUID CRYSTAL POLYMER, UL 94V-0, COLOR: BLACK).
- FINISH:
TIN = (0.00380)/.000150 MINIMUM TIN PLATE OVER (0.00127)/.000050 MINIMUM NICKEL PLATE.
15 GOLD = (0.00038)/.000015 MINIMUM GOLD PLATE IN SELECT AREA, (0.00190)/.000075 MINIMUM TIN PLATE IN 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 CHKD: LSCMIDT APPR: FSM/TH | 2008/03/31 2008/04/07 2008/04/24 | DESCRIPTION G6 | 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 ±.013 ±.01 1 PLACE ±.025 ±--- ANGULAR ±1/2° | DRAWN BY SMR DATE 04/19/1993 | CHECKED BY DATE | TITLE SALES ASSY-HIGH TEMP. DUAL ROW WAFER W/BREAK-OFF OPT. .025 SQ PINS | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | MATERIAL NO. SEE TABLE | | APPROVED BY SMR DATE 04/19/1993 | | MOLEX INCORPORATED | | SHEET NO. 1 OF 9 |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | |

