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ELECTRONICS

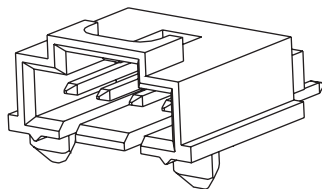
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Jameco Part Number 1961461

# 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

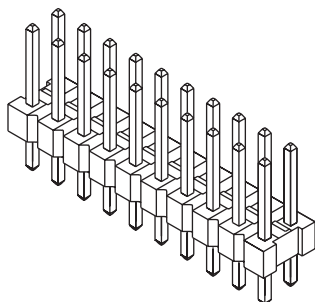
| Circuits | Order No.                  |                            |                            | Lead-free |
|----------|----------------------------|----------------------------|----------------------------|-----------|
|          | Tin                        | 15µm Gold                  | 30µm Gold                  |           |
| 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

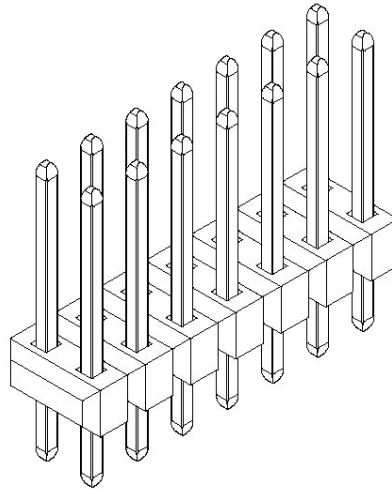
**Not For Use With Molex C-Grid III™ Components**

| 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.



# PRODUCT SPECIFICATION



SERIES 70280 / 70287

## C-GRID® VERTICAL THROUGH HOLE .100" GRID DUAL ROW HEADER WITH BREAK OFF OPTION SERIES 70280 / 70287

- 1.0 SCOPE
- 2.0 PRODUCT DESCRIPTION
  - 2.1 PRODUCT NAME AND SERIES NUMBER
  - 2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS
  - 2.3 SAFETY AGENCY APPROVALS
- 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS
- 4.0 RATINGS
  - 4.1 VOLTAGE
  - 4.2 CURRENT
  - 4.3 TEMPERATURE
- 5.0 PERFORMANCE
  - 5.1 ELECTRICAL REQUIREMENTS
  - 5.2 MECHANICAL REQUIREMENTS
- 6.0 PACKAGING

|                                     |   |  |                               |
|-------------------------------------|---|--|-------------------------------|
| REVISION:<br><b>B3</b>              | EGR/ECN INFORMATION:<br>EC No: UCP2008-0465<br>DATE: 9/5/2007 | TITLE:<br><b>.100" GRID VERTICAL<br/>MOUNT DUAL ROW<br/>BREAKAWAY HEADER</b> | SHEET No.<br><b>1 of 3</b>    |
| DOCUMENT NUMBER:<br><b>PS-70280</b> | CREATED / REVISED BY:<br><b>ADERR</b>                         | CHECKED BY:<br><b>LSCHMIDT</b>   | APPROVED BY:<br><b>FSMITH</b> |



# PRODUCT SPECIFICATION

## 1.0 SCOPE:

This specification covers the C-Grid® vertical dual row header with break-off option. The wafer (header body) is designed to be easily modified to a smaller circuit size in the field if required. The mating pins are .025in (0.64mm) square and have .100in (2.54mm) grid spacing.

## 2.0 PRODUCT DESCRIPTION

### 2.1 PRODUCT NAME AND SERIES NUMBER

SERIES 70280: Vertical mount through hole dual row header with break off option.

SERIES 70287: Vertical mount through hole dual row header with retention pins and break off option.

### 2.2 DIMENSIONS, PLATINGS, AND MARKINGS

The products are available in circuit sizes of 4 through 100 circuits and are end to end stackable. Product can also be ordered with selective voids. The wafer is produced from glass filled Liquid Crystal Polymer, (LCP) having a UL 94V-0 flammability rating. Mating pin lengths are .240in (6.0mm), and .320in (8.1mm) with gold or tin plating. For further details, please refer to the sales documents in section 3.0.

### 2.3 RECOGNIZED AGENCY APPROVALS:

2.3.1 Underwriters' Laboratories: E29179

2.3.2 Canadian Standards Association: LR19980

## 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS:

### 3.1 MOLEX DOCUMENTS

|                     |  |
|---------------------|--|
| SDA-70280-0001-4000 | SALES DRAWING, VERTICAL MOUNT THROUGH HOLE DUAL ROW HEADER WITH BREAK OFF OPTION                     |
| SDA-70280-5001-9999 | SALES DRAWING, VERTICAL MOUNT THROUGH HOLE DUAL ROW HEADER WITH BREAK OFF OPTION AND SELECTIVE VOIDS |
| SD-70280-001        | SALES DRAWING, VERTICAL MOUNT THROUGH HOLE DUAL ROW HEADER WITH BREAK OFF OPTION                     |
| SD-70280-002        | SALES DRAWING, VERTICAL MOUNT THROUGH HOLE DUAL ROW HEADER WITH BREAK OFF OPTION, CUSTOM HEADERS     |
| SDA-70280-003       | SALES DRAWING, VERTICAL MOUNT THROUGH HOLE DUAL ROW HEADER WITH BREAK OFF OPTION                     |
| SD-70287-003        | SALES DRAWING, VERTICAL MOUNT THROUGH HOLE DUAL ROW HEADER WITH RETENTION PINS AND BREAK OFF OPTION  |
| PK-70873-0353       | PACKAGING SPECIFICATION VERTICAL MOUNT THROUGH DUAL ROW HEADER WITH BREAK OFF OPTION                 |
| PK-70873-0276       | PACKAGING SPECIFICATION VERTICAL MOUNT THROUGH DUAL ROW HEADER WITH BREAK OFF OPTION                 |

|                                     |   |  |                               |
|-------------------------------------|---|--|-------------------------------|
| REVISION:<br><b>B3</b>              | EGR/ECN INFORMATION:<br>EC No: <b>UCP2008-0465</b><br>DATE: <b>9/5/2007</b> | TITLE:<br><b>.100" GRID VERTICAL MOUNT DUAL ROW BREAKAWAY HEADER</b> | SHEET No.<br><b>2 of 3</b>    |
| DOCUMENT NUMBER:<br><b>PS-70280</b> | CREATED / REVISED BY:<br><b>ADERR</b>                                       | CHECKED BY:<br><b>LSCHMIDT</b>                                       | APPROVED BY:<br><b>FSMITH</b> |



# PRODUCT SPECIFICATION

PK-70873-0090

PACKAGING SPECIFICATION VERTICAL MOUNT THROUGH DUAL ROW HEADER WITH BREAK OFF OPTION

PS-45499-002

COSMETIC SPECIFICATION

### 3.2 OTHER DOCUMENTS

MIL STD 202F

### 4.0 RATINGS

4.1 **VOLTAGE:** 250 Volts D.C.

4.2 **CURRENT:** 3.0 Amp D.C. maximum.

4.3 **TEMPERATURE:**

4.3.1 **PROCESSING TEMPERATURE:** (see SMES-152)

Wave Solder Process

Dip connector pin tails in solder;

Solder Temperature: 260°C MAX

Solder Duration: 5 +/- 0.5 seconds

4.3.2 **OPERATING TEMPERATURE** (ambient +30° temp rise): -40 °C to +120 °C

**NON-OPERATING TEMPERATURE:** -30 °C to +60 °C

### 5.0 PERFORMANCE

#### 5.1 ELECTRICAL REQUIREMENTS

5.1.1 **INSULATION RESISTANCE:** Greater than 1,000MΩ at sea level.

5.1.2 **DIELECTRIC WITHSTANDING VOLTAGE:** Greater than 600 Volts at sea level.

5.1.3 **TEMPERATURE RISE:** 30°C maximum at rated current

#### 5.2 MECHANICAL REQUIREMENTS:

5.2.1 **Header pin retention** (push out force): 3 lbs minimum before soldering.

5.2.2 **Durability:** Mate connectors up to 25 cycles at a maximum rate of 10 cycles/minute prior to environmental testing. 10 milliohms maximum (change from initial).

#### 5.3 ENVIRONMENTAL REQUIREMENTS:

5.3.1 **THERMAL SHOCK**

10 Cycles from -40°C to 105°C, ½ hour at each temperature setting.

5.3.2 **CHEMICAL RESISTANCE**

Per Mil. Std. 202F, Method 215A.

6.0 **PACKAGING** Refer to section 3.0 for packaging documents

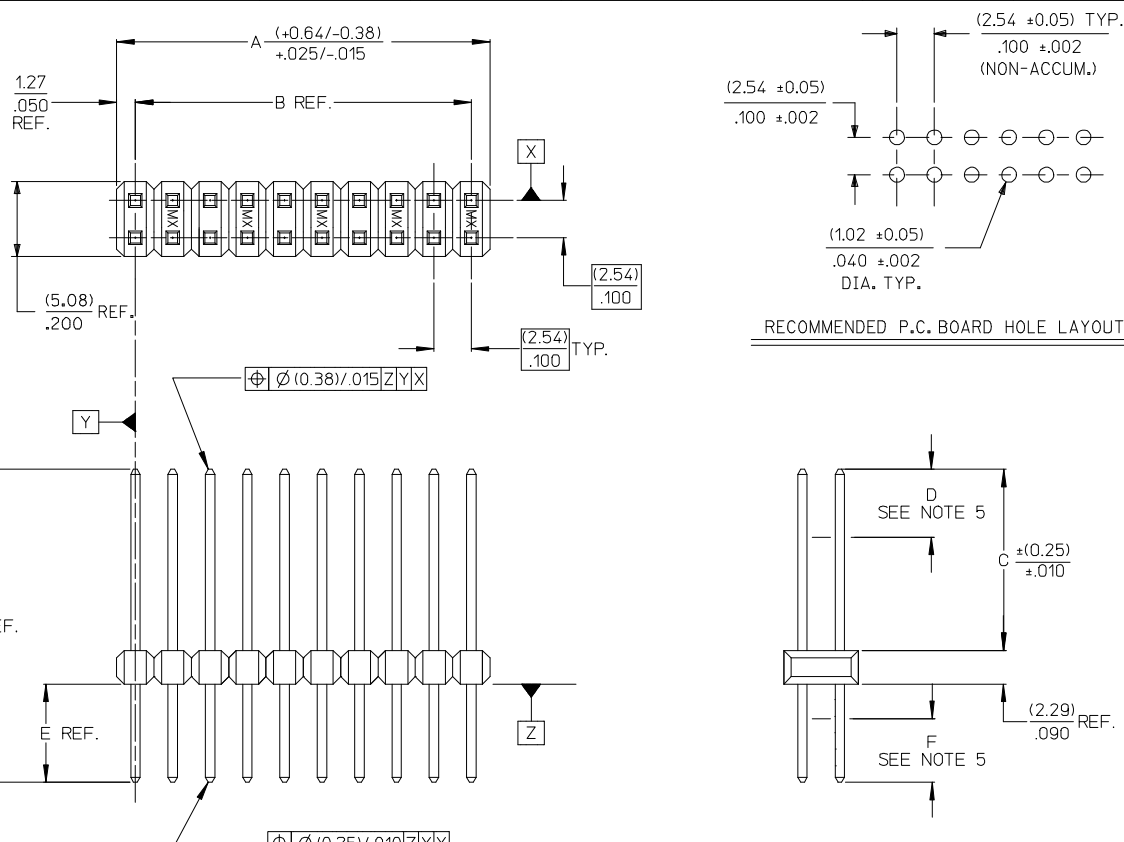
|                                     |   |  |                               |
|-------------------------------------|---|--|-------------------------------|
| REVISION:<br><b>B3</b>              | EGR/ECN INFORMATION:<br>EC No: <b>UCP2008-0465</b><br>DATE: <b>9/5/2007</b> | TITLE:<br><b>.100" GRID VERTICAL MOUNT DUAL ROW BREAKAWAY HEADER</b> | SHEET No.<br><b>3 of 3</b>    |
| DOCUMENT NUMBER:<br><b>PS-70280</b> | CREATED / REVISED BY:<br><b>ADERR</b>                                       | CHECKED BY:<br><b>LSCHMIDT</b>                                       | APPROVED BY:<br><b>FSMITH</b> |

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

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

|   | 13                             | 12                      | 11 | 10 | 9           | 8            | 7              | 6 | 5    | 4                     | 3           | 2                      | 1           |   |
|---|--------------------------------|-------------------------|----|----|-------------|--------------|----------------|---|------|-----------------------|-------------|------------------------|-------------|---|
| J | ENGINEERING NUMBER<br>A-70280- | RELEASE FOR MANUFACTURE |    |    | E REF.      | J REF.       | C ±(0.25) .010 |   |      | CONNECTOR END PLATING |             | P.C. BOARD END PLATING |             | FOR PACKAGING INFORMATION, SEE NOTE 4, SHEET 1 (UNLESS OTHERWISE SPECIFIED BELOW) |
|   |                                |                         |    |    |             |              |                |   | TYPE | D MEAS.               |             | TYPE                   | F MEAS.     |   |
|   | -0001/-0040                    | R.F.M.                  |    |    | (2.72) .107 | (11.10) .437 | (6.10) .240    |   |      | TIN                   | (2.54) .100 | TIN                    | (1.27) .050 |   |
|   | -0041/-0080                    | R.F.M.                  |    |    | (2.72) .107 | (11.10) .437 | (6.10) .240    |   |      | 15 GOLD               | (2.54) .100 | TIN                    | (1.27) .050 |   |
| I | -0081/-0120                    | R.F.M.                  |    |    | (2.72) .107 | (11.10) .437 | (6.10) .240    |   |      | 30 GOLD               | (2.54) .100 | TIN                    | (1.27) .050 |   |
|   | -0121/-0160                    | R.F.M.                  |    |    | (2.79) .110 | (13.21) .520 | (8.13) .320    |   |      | TIN                   | (4.57) .180 | TIN                    | (1.27) .050 |   |
|   | -0161/-0200                    | R.F.M.                  |    |    | (2.79) .110 | (13.21) .520 | (8.13) .320    |   |      | 15 GOLD               | (4.57) .180 | TIN                    | (1.27) .050 |   |
|   | -0201/-0240                    | R.F.M.                  |    |    | (2.79) .110 | (13.21) .520 | (8.13) .320    |   |      | 30 GOLD               | (4.57) .180 | TIN                    | (1.27) .050 |   |
| H | -0241/-0280                    | R.F.M.                  |    |    | (3.94) .155 | (12.32) .485 | (6.10) .240    |   |      | 30 GOLD               | (2.54) .100 | TIN                    | (1.27) .050 |   |

|   |      |             |               |             |               |             |               |             |               |             |               |             |               |             |               |            |      |
|---|------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|------------|------|
|   | CKTS | EDP NUMBER  | ENG NUMBER    | EDP NUMBER  | ENG NUMBER    | EDP NUMBER  | ENG NUMBER    | EDP NUMBER  | ENG NUMBER    | EDP NUMBER  | ENG NUMBER    | EDP NUMBER  | ENG NUMBER    | EDP NUMBER  | ENG NUMBER    | EDP NUMBER | CKTS |
|   |      | N.A.        | AX-70280-0001 | N.A.        | AX-70280-0041 | N.A.        | AX-70280-0081 | N.A.        | AX-70280-0121 | N/A         | AX-70280-0161 | N/A         | AX-70280-0201 | N/A         | AX-70280-0241 |            |      |
|   | 04   | 010-89-7041 | A-70280-0002  | 010-89-7042 | A-70280-0042  | 010-89-7043 | A-70280-0082  | 010-97-7045 | A-70280-0122  | 010-97-7046 | A-70280-0162  | 010-89-7043 | A-70280-0202  | 010-87-9045 | A-70280-0242  | 04         |      |
| G | 06   | 010-89-7061 | A-70280-0003  | 010-89-7062 | A-70280-0043  | 010-89-7063 | A-70280-0083  | 010-97-7065 | A-70280-0123  | 010-97-7066 | A-70280-0163  | 010-89-7063 | A-70280-0203  | 010-87-9065 | A-70280-0243  | 06         |      |
|   | 08   | 010-89-7081 | A-70280-0004  | 010-89-7082 | A-70280-0044  | 010-89-7083 | A-70280-0084  | 010-97-7085 | A-70280-0124  | 010-97-7086 | A-70280-0164  | 010-89-7083 | A-70280-0204  | 010-87-9085 | A-70280-0244  | 08         |      |
|   | 10   | 010-89-7101 | A-70280-0005  | 010-89-7102 | A-70280-0045  | 010-89-7103 | A-70280-0085  | 010-97-7105 | A-70280-0125  | 010-97-7106 | A-70280-0165  | 010-89-7103 | A-70280-0205  | 010-87-9105 | A-70280-0245  | 10         |      |
|   | 12   | 010-89-7121 | A-70280-0006  | 010-89-7122 | A-70280-0046  | 010-89-7123 | A-70280-0086  | 010-97-7125 | A-70280-0126  | 010-97-7126 | A-70280-0166  | 010-89-7123 | A-70280-0206  | 010-87-9125 | A-70280-0246  | 12         |      |
|   | 14   | 010-89-7141 | A-70280-0007  | 010-89-7142 | A-70280-0047  | 010-89-7143 | A-70280-0087  | 010-97-7145 | A-70280-0127  | 010-97-7146 | A-70280-0167  | 010-89-7143 | A-70280-0207  | 010-87-9145 | A-70280-0247  | 14         |      |
|   | 16   | 010-89-7161 | A-70280-0008  | 010-89-7162 | A-70280-0048  | 010-89-7163 | A-70280-0088  | 010-97-7165 | A-70280-0128  | 010-97-7166 | A-70280-0168  | 010-89-7163 | A-70280-0208  | 010-87-9165 | A-70280-0248  | 16         |      |
|   | 18   | 010-89-7181 | A-70280-0009  | 010-89-7182 | A-70280-0049  | 010-89-7183 | A-70280-0089  | 010-97-7185 | A-70280-0129  | 010-97-7186 | A-70280-0169  | 010-89-7183 | A-70280-0209  | 010-87-9185 | A-70280-0249  | 18         |      |
|   | 20   | 010-89-7201 | A-70280-0010  | 010-89-7202 | A-70280-0050  | 010-89-7203 | A-70280-0090  | 010-97-7205 | A-70280-0130  | 010-97-7206 | A-70280-0170  | 010-89-7203 | A-70280-0210  | 010-87-9205 | A-70280-0250  | 20         |      |
| F | 22   | 010-89-7221 | A-70280-0011  | 010-89-7222 | A-70280-0051  | 010-89-7223 | A-70280-0091  | 010-97-7225 | A-70280-0131  | 010-97-7226 | A-70280-0171  | 010-89-7223 | A-70280-0211  | 010-87-9225 | A-70280-0251  | 22         |      |
|   | 24   | 010-89-7241 | A-70280-0012  | 010-89-7242 | A-70280-0052  | 010-89-7243 | A-70280-0092  | 010-97-7245 | A-70280-0132  | 010-97-7246 | A-70280-0172  | 010-89-7243 | A-70280-0212  | 010-87-9245 | A-70280-0252  | 24         |      |
|   | 26   | 010-89-7261 | A-70280-0013  | 010-89-7262 | A-70280-0053  | 010-89-7263 | A-70280-0093  | 010-97-7265 | A-70280-0133  | 010-97-7266 | A-70280-0173  | 010-89-7263 | A-70280-0213  | 010-87-9265 | A-70280-0253  | 26         |      |
|   | 28   | 010-89-7281 | A-70280-0014  | 010-89-7282 | A-70280-0054  | 010-89-7283 | A-70280-0094  | 010-97-7285 | A-70280-0134  | 010-97-7286 | A-70280-0174  | 010-89-7283 | A-70280-0214  | 010-87-9285 | A-70280-0254  | 28         |      |
|   | 30   | 010-89-7301 | A-70280-0015  | 010-89-7302 | A-70280-0055  | 010-89-7303 | A-70280-0095  | 010-97-7305 | A-70280-0135  | 010-97-7306 | A-70280-0175  | 010-89-7303 | A-70280-0215  | 010-87-9305 | A-70280-0255  | 30         |      |
|   | 32   | 010-89-7321 | A-70280-0016  | 010-89-7322 | A-70280-0056  | 010-89-7323 | A-70280-0096  | 010-97-7325 | A-70280-0136  | 010-97-7326 | A-70280-0176  | 010-89-7323 | A-70280-0216  | 010-87-9325 | A-70280-0256  | 32         |      |
|   | 34   | 010-89-7341 | A-70280-0017  | 010-89-7342 | A-70280-0057  | 010-89-7343 | A-70280-0097  | 010-97-7345 | A-70280-0137  | 010-97-7346 | A-70280-0177  | 010-89-7343 | A-70280-0217  | 010-87-9345 | A-70280-0257  | 34         |      |
|   | 36   | 010-89-7361 | A-70280-0018  | 010-89-7362 | A-70280-0058  | 010-89-7363 | A-70280-0098  | 010-97-7365 | A-70280-0138  | 010-97-7366 | A-70280-0178  | 010-89-7363 | A-70280-0218  | 010-87-9365 | A-70280-0258  | 36         |      |
| E | 38   | 010-89-7381 | A-70280-0019  | 010-89-7382 | A-70280-0059  | 010-89-7383 | A-70280-0099  | 010-97-7385 | A-70280-0139  | 010-97-7386 | A-70280-0179  | 010-89-7383 | A-70280-0219  | 010-87-9385 | A-70280-0259  | 38         |      |
|   | 40   | 010-89-7401 | A-70280-0020  | 010-89-7402 | A-70280-0060  | 010-89-7403 | A-70280-0100  | 010-97-7405 | A-70280-0140  | 010-97-7406 | A-70280-0180  | 010-89-7403 | A-70280-0220  | 010-87-9405 | A-70280-0260  | 40         |      |
|   | 42   | 010-89-7421 | A-70280-0021  | 010-89-7422 | A-70280-0061  | 010-89-7423 | A-70280-0101  | 010-97-7425 | A-70280-0141  | 010-97-7426 | A-70280-0181  | 010-89-7423 | A-70280-0221  | 010-87-9425 | A-70280-0261  | 42         |      |
|   | 44   | 010-89-7441 | A-70280-0022  | 010-89-7442 | A-70280-0062  | 010-89-7443 | A-70280-0102  | 010-97-7445 | A-70280-0142  | 010-97-7446 | A-70280-0182  | 010-89-7443 | A-70280-0222  | 010-87-9445 | A-70280-0262  | 44         |      |
|   | 46   | 010-89-7461 | A-70280-0023  | 010-89-7462 | A-70280-0063  | 010-89-7463 | A-70280-0103  | 010-97-7465 | A-70280-0143  | 010-97-7466 | A-70280-0183  | 010-89-7463 | A-70280-0223  | 010-87-9465 | A-70280-0263  | 46         |      |
|   | 48   | 010-89-7481 | A-70280-0024  | 010-89-7482 | A-70280-0064  | 010-89-7483 | A-70280-0104  | 010-97-7485 | A-70280-0144  | 010-97-7486 | A-70280-0184  | 010-89-7483 | A-70280-0224  | 010-87-9485 | A-70280-0264  | 48         |      |
|   | 50   | 010-89-7501 | A-70280-0025  | 010-89-7502 | A-70280-0065  | 010-89-7503 | A-70280-0105  | 010-97-7505 | A-70280-0145  | 010-97-7506 | A-70280-0185  | 010-89-7503 | A-70280-0225  | 010-87-9505 | A-70280-0265  | 50         |      |
|   | 52   | 010-89-7521 | A-70280-0026  | 010-89-7522 | A-70280-0066  | 010-89-7523 | A-70280-0106  | 010-97-7525 | A-70280-0146  | 010-97-7526 | A-70280-0186  | 010-89-7523 | A-70280-0226  | 010-87-9525 | A-70280-0266  | 52         |      |
| D | 54   | 010-89-7541 | A-70280-0027  | 010-89-7542 | A-70280-0067  | 010-89-7543 | A-70280-0107  | 010-97-7545 | A-70280-0147  | 010-97-7546 | A-70280-0187  | 010-89-7543 | A-70280-0227  | 010-87-9545 | A-70280-0267  | 54         |      |
|   | 56   | 010-89-7561 | A-70280-0028  | 010-89-7562 | A-70280-0068  | 010-89-7563 | A-70280-0108  | 010-97-7565 | A-70280-0148  | 010-97-7566 | A-70280-0188  | 010-89-7563 | A-70280-0228  | 010-87-9565 | A-70280-0268  | 56         |      |
|   | 58   | 010-89-7581 | A-70280-0029  | 010-89-7582 | A-70280-0069  | 010-89-7583 | A-70280-0109  | 010-97-7585 | A-70280-0149  | 010-97-7586 | A-70280-0189  | 010-89-7583 | A-70280-0229  | 010-87-9585 | A-70280-0269  | 58         |      |
|   | 60   | 010-89-7601 | A-70280-0030  | 010-89-7602 | A-70280-0070  | 010-89-7603 | A-70280-0110  | 010-97-7605 | A-70280-0150  | 010-97-7606 | A-70280-0190  | 010-89-7603 | A-70280-0230  | 010-87-9605 | A-70280-0270  | 60         |      |
|   | 62   | 010-89-7621 | A-70280-0031  | 010-89-7622 | A-70280-0071  | 010-89-7623 | A-70280-0111  | 010-97-7625 | A-70280-0151  | 010-97-7626 | A-70280-0191  | 010-89-7623 | A-70280-0231  | 010-87-9625 | A-70280-0271  | 62         |      |
|   | 64   | 010-89-7641 | A-70280-0032  | 010-89-7642 | A-70280-0072  | 010-89-7643 | A-70280-0112  | 010-97-7645 | A-70280-0152  | 010-97-7646 | A-70280-0192  | 010-89-7643 | A-70280-0232  | 010-87-9645 | A-70280-0272  | 64         |      |
|   | 66   | 010-89-7661 | A-70280-0033  | 010-89-7662 | A-70280-0073  | 010-89-7663 | A-70280-0113  | 010-97-7665 | A-70280-0153  | 010-97-7666 | A-70280-0193  | 010-89-7663 | A-70280-0233  | 010-87-9665 | A-70280-0273  | 66         |      |
|   | 68   | 010-89-7681 | A-70280-0034  | 010-89-7682 | A-70280-0074  | 010-89-7683 | A-70280-0114  | 010-97-7685 | A-70280-0154  | 010-97-7686 | A-70280-0194  | 010-89-7683 | A-70280-0234  | 010-87-9685 | A-70280-0274  | 68         |      |
| C | 70   | 010-89-7701 | A-70280-0035  | 010-89-7702 | A-70280-0075  | 010-89-7703 | A-70280-0115  | 010-97-7705 | A-70280-0155  | 010-97-7706 | A-70280-0195  | 010-89-7703 | A-70280-0235  | 010-87-9705 | A-70280-0275  | 70         |      |
|   | 72   | 010-89-7721 | A-70280-0036  | 010-89-7722 | A-70280-0076  | 010-89-7723 | A-70280-0116  | 010-97-7725 | A-70280-0156  | 010-97-7726 | A-70280-0196  | 010-89-7723 | A-70280-0236  | 010-87-9725 | A-70280-0276  | 72         |      |
|   | 74   | 010-89-7741 | A-70280-0037  | 010-89-7742 | A-70280-0077  | 010-89-7743 | A-70280-0117  | 010-97-7745 | A-70280-0157  | 010-97-7746 | A-70280-0197  | 010-89-7743 | A-70280-0237  | 010-87-9745 | A-70280-0277  | 74         |      |
|   | 76   | 010-89-7761 | A-70280-0038  | 010-89-7762 | A-70280-0078  | 010-89-7763 | A-70280-0118  | 010-97-7765 | A-70280-0158  | 010-97-7766 | A-70280-0198  | 010-89-7763 | A-70280-0238  | 010-87-9765 | A-70280-0278  | 76         |      |
|   | 78   | 010-89-7781 | A-70280-0039  | 010-89-7782 | A-70280-0079  | 010-89-7783 | A-70280-0119  | 010-97-7785 | A-70280-0159  | 010-97-7786 | A-70280-0199  | 010-89-7783 | A-70280-0239  | 010-87-9785 | A-70280-0279  | 78         |      |
|   | 80   | 010-89-7801 | A-70280-0040  | 010-89-7802 | A-70280-0080  | 010-89-7803 | A-70280-0120  | 010-97-7805 | A-70280-0160  | 010-97-7806 | A-70280-0200  | 010-89-7803 | A-70280-0240  | 010-87-9805 | A-70280-0280  | 80         |      |

|   |   |  |  |  |                               |  |
|---|---|--|--|--|-------------------------------|--|
| B | UPDATE DIMENSIONS<br>EC NO: UCP2007-1440<br>DRAWN: PDR 2006/12/18<br>CHKD: ADERR 2006/12/18<br>APPR: ESM TH 2007/01/10<br>REV: G3 |  |  |  | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>mm    INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± --- ± ---<br>1 PLACE ± |
|---|---|--|--|--|-------------------------------|--|