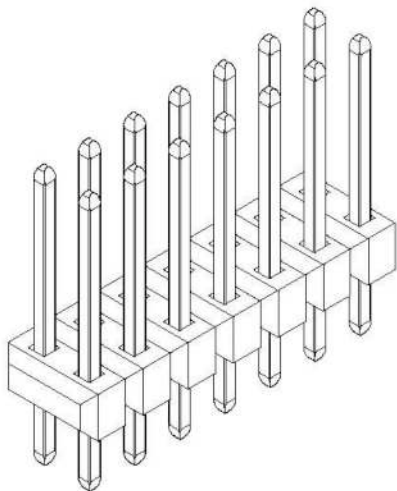




PRODUCT SPECIFICATION



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
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 - 4.3 TEMPERATURE
- 5.0 PERFORMANCE
 - 5.1 ELECTRICAL REQUIREMENTS
 - 5.2 MECHANICAL REQUIREMENTS
- 6.0 PACKAGING

REVISION: D	ECR/ECN INFORMATION: EC No: UCP2014-2349 DATE: 1/6/2014	TITLE: .100" GRID VERTICAL MOUNT DUAL ROW BREAKAWAY HEADER	SHEET No. 1 of 3
DOCUMENT NUMBER: PS-70280	CREATED / REVISED BY: MKIPPER	CHECKED BY: JBELL	APPROVED BY: FSMITH



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
SD-70287-004	SALES DRAWING, VERTICAL MOUNT THROUGH HOLE DUAL ROW HEADER WITH RETENTION PINS AND BREAK OFF OPTION
PK-70873-0090	PACKAGING SPECIFICATION VERTICAL MOUNT THROUGH DUAL ROW HEADER WITH BREAK OFF OPTION

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PS-70280	MKIPPER	JBELL	FSMITH



PRODUCT SPECIFICATION

PK-70873-0276	PACKAGING SPECIFICATION VERTICAL MOUNT THROUGH DUAL ROW HEADER WITH BREAK OFF OPTION
PK-70873-0353	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 OPERATING TEMPERATURE (ambient +30° temp rise):

Gold Plated Contacts: -40 °C to +120 °C

Tin Plated Contacts: -40 °C to +105 °C

NON-OPERATING TEMPERATURE: -40 °C to +105 °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.

5.3.3 SOLDERABILITY

Per SMES-152. Solder coverage: 95% minimum.

5.3.4 SOLDER RESISTANCE

Wave Solder Process

Dip connector pin tails in solder;

Solder Temperature: 245°C max. for bright tin plating

260°C max. for select gold plating

Solder Duration: 5 ±0.5 seconds

6.0 PACKAGING Refer to section 3.0 for packaging documents

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