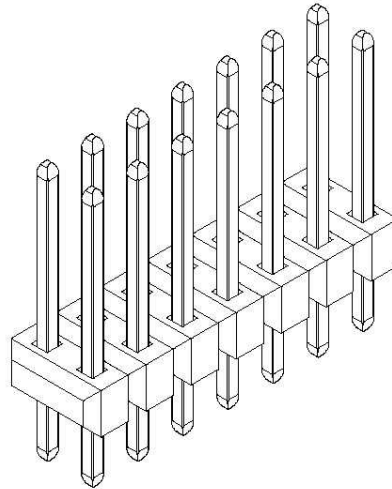




# PRODUCT SPECIFICATION



SERIES 70280 / 70287

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

- 1.0 SCOPE
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REVISION: <b>B4</b>	ECR/ECN INFORMATION: EC No: <b>UCP2008-1376</b> DATE: <b>7/1/2009</b>	TITLE: <b>.100" GRID VERTICAL MOUNT DUAL ROW BREAKAWAY HEADER</b>	SHEET No. <b>1 of 3</b>
DOCUMENT NUMBER: <b>PS-70280</b>	CREATED / REVISED BY: <b>MKIPPER</b>	CHECKED BY: <b>JBELL</b>	APPROVED BY: <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-70873-0090	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

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# PRODUCT SPECIFICATION

PK-70873-0277

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): -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.

5.3.3 SOLDERABILITY

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

5.3.4 PROCESSING HEAT RESISTANCE

Wave Solder Process

Dip connector pin tails in solder;

Solder Temperature: 260°C MAX

Solder Duration: 5 ±0.5 seconds

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

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