THE DATASHEET OF

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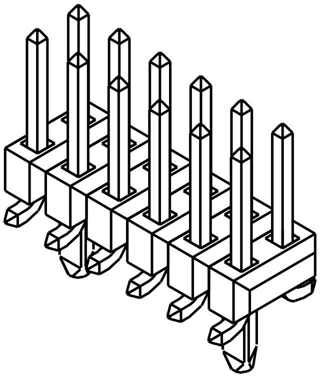
PRODUCT SPECIFICATION



SERIES 71308

C-GRID® SMT
.100" GRID DUAL ROW HEADERS
SERIES 71308

1.0 SCOPE:

This specification covers C-Grid® dual row surface mount headers. They utilize a gull wing design for surface mounting. The mating pins are .025in (0.64mm) square on a .100in (2.54mm) grid.

2.0 PRODUCT DESCRIPTION:

2.1 PRODUCT NAME AND SERIES NUMBER(S)

2.1.1 SERIES 71308: Low profile vertical surface mount header.

DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

C-Grid® series 71308 is available in circuit sizes of 4 through 100 circuits and is end to end stackable. The wafer is made 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. Integral mounting pegs are offered in two lengths for each series as an option to aid assembly and/or retention during soldering. For further details, refer to sales document in section 3.1.

2.2 SAFETY AGENCY APPROVALS

2.2.1 UNDERWRITERS' LABORATORIES (UL) FILE NUMBER: E29179

2.2.2 CANADIAN STANDARDS ASSOCIATION (CSA) FILE NUMBER: LR19980

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

3.1 MOLEX DOCUMENTS

SD--71308-001	SALES DRAWING FOR LOW PROFILE C-GRID® SMT HEADER
PK-70873-0353	PACKAGING SPECIFICATION FOR BULK PACKAGED PRODUCT (CIRCUIT SIZES 4-8)
713080000-PK	PACKAGING SPECIFICATION FOR TAPE AND REEL ALL OPTIONS
713080001-PK	PACKAGING SPECIFICATION FOR TUBE PACK 6.1 MATE WITH OR WITHOUT PEGS NO CAPS
713080002-PK	PACKAGING SPECIFICATION FOR TUBE PACK 6.1 MATE WITH OR WITHOUT PEGS WITH CAPS
713080003-PK	PACKAGING SPECIFICATION FOR TUBE PACK 8.0 -11.0 MATE WITH OR WITHOUT SHORT PEGS WITH CAPS
PS-45499-002	COSMETIC SPECIFICATION

3.2 OTHER DOCUMENTS

MIL STD 202F

4.0 RATINGS

4.1 VOLTAGE: 250 Volts DC

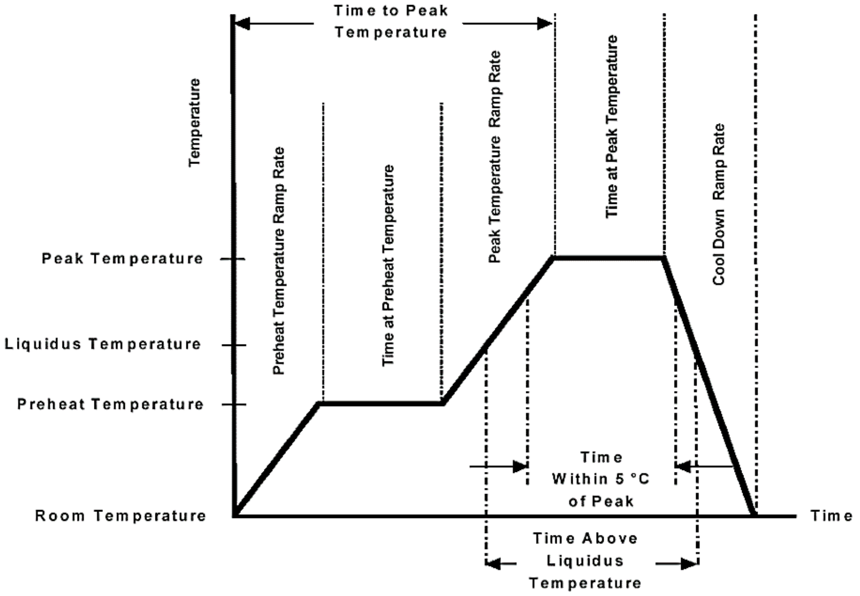
4.2 CURRENT: 3.0 Amps (DC) max

4.3 TEMPERATURE

4.3.1 PROCESSING TEMPERATURE: 245°C max. intermittent for bright tin plating
260°C max. intermittent for select gold plating.

4.3.2 OPERATING TEMPERATURE: –40°C to +120°C

4.4 REFLOW SOLDERING PROFILE *



Description	Requirement
Average Ramp Rate	3°C/sec Max
Preheat Temperature	150°C Min to 200°C Max
Preheat Time	60 to 180 sec
Ramp to Peak	3°C/sec Max
Time over Liquidus (217°C)	60 to 150 sec
Peak Temperature	260 +0/-5°C
Time within 5°C of Peak	20 to 40 sec
Ramp - Cool Down	6°C/sec Max
Time 25°C to Peak	8 min Max

NOTE: Reflow soldering profile for select gold plating and Reflow tin plating

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

5.1.1 INSULATION RESISTANCE: Greater than 1000MΩ

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

5.1.3 TEMPERATURE RISE: 30°C max at rated current

5.2 MECHANICAL REQUIREMENTS

5.2.1 RETENTION PEGS (Optional Item)

5.2.1.1 INSERTION FORCE: 8.0 lbs average per peg (.062in PCB hole)

5.2.1.2 RETENTION FORCE: 4.0 lbs average per peg (.062in PCB hole)

5.3 ENVIRONMENTAL REQUIREMENTS

5.3.1 THERMAL SHOCK

10 Cycles from -40°C to105°C, ½ hour at each temperature setting.

5.3.2 CHEMICAL RESISTANCE

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

5.4 ENVIRONMENTAL PERFORMANCE

DESCRIPTION	TEST CONDITION	REQUIREMENT
5.4.1 Solderability	Steam age 8 hours +/- 15 min Solder Time: 5 ± 0.5 sec. Solder Temperature: 245 ±5 °C	Solder tail should have 95% continuous new solder coating coverage

6.0 PACKAGING

Product is available in bulk pack, tube pack and tape and reel. Tape and reel packaging include a pick-n-place cap, ideal for high volume robotic placement. The pick-n-place cap is optional for tube packaged product. Refer to section 3.1 for applicable packaging document.