



PRODUCT SPECIFICATION

FULL SHROUDED DUAL ROW HEADER, .100" GRID

1.0 SCOPE

This specification covers C-Grid® dual row shrouded header system on .100in (2.54mm) grid. The wafer (header) body has a full shroud (4 sided), a window on one (top) wall to accommodate latching and key slots on the opposite wall for added polarization. Retention pegs are designed for printed circuit board mounting.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER(S)

Product Name

Shrouded right angle mount dual row through hole header with pegs

Product Number

74164 Series

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

The C-Grid® right angle shrouded headers are offered in circuit sizes from 6 circuits to 72 circuits in 2 circuit increments. Mating pins for this series are .025in (0.64mm) square and are available with tin or gold plating in the contact area. The solder tails are tin plated. Tail length and mounting pegs are configured to fit into a .062in (1.57mm) circuit board. The inside of shroud-to-mating pin clearance is .150in (3.81mm) at opposite ends of the connector (lengthwise). For further dimensional, material, plating and marking details, refer to the sales drawing(s) listed in section 3.0.

2.3 SAFETY AGENCY APPROVALS

UL File: TBD

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

<u>Document</u>	<u>Description</u>
SD-74164-001	Sales Drawing, Shrouded Right Angle Mount Through Hole Dual Row Header with pegs
PK-70873-0019	Packaging Specification Right Angle Mount Through Hole Dual Row Header

4.0 RATINGS

4.1 VOLTAGE

250 Volts DC

4.2 CURRENT

2.5 Amps (DC) maximum

REVISION: A	ECR/ECN INFORMATION: EC No: UCP2009-1776 DATE: 2009 / 04 / 06	TITLE: PRODUCT SPECIFICATION .100" GRID RIGHT ANGLE MOUNT DUAL ROW SHROUDED HDR W/PEGS	SHEET No. 1 of 3
DOCUMENT NUMBER: PS-74164-001	CREATED / REVISED BY: MIBARRA	CHECKED BY: BBARKER	APPROVED BY: SMILLER



PRODUCT SPECIFICATION

4.3 TEMPERATURE

Operating: - 40°C to + 105°C
 Nonoperating: - 30°C to + 60°C

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Contact Resistance (Low Level)	Mate connectors: apply a maximum voltage of 20 mV and a current of 100 mA.	15 milliohms MAXIMUM [initial]
2	Insulation Resistance	Unmate & unmount connectors: apply a voltage of 500 VDC between adjacent terminals and between terminals to ground.	1000 Megohms MINIMUM
3	Dielectric Withstanding Voltage	Unmate connectors: apply a voltage of {two times the rated voltage plus 1500 volts} VAC for 1 minute between adjacent terminals and between terminals to ground.	No breakdown; current leakage < 5 mA
4	Temperature Rise	Mate connectors: measure the temperature rise at the rated current after: 96 hours (45 minutes ON and 15 minutes OFF per hour).	Temperature rise: +30°C MAXIMUM

5.2 MECHANICAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5	Pin Retention Force (in Housing)	Axial pullout force on the terminal in the housing at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute.	17.79 N (4 lbf) MINIMUM retention force
6	Durability	Mate connectors up to {25 cycles for tin plating OR 50 cycles for gold plating} at a maximum rate of 10 cycles per minute prior to Environmental Tests.	10 milliohms MAXIMUM (change from initial)

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5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT						
7	Shock (Thermal)	Mate connectors; expose to 10 cycles of: <table border="1"> <thead> <tr> <th>Temperature °C</th> <th>Duration (Minutes)</th> </tr> </thead> <tbody> <tr> <td>-40 +0/-3</td> <td>30</td> </tr> <tr> <td>+105 +3/-0</td> <td>30</td> </tr> </tbody> </table>	Temperature °C	Duration (Minutes)	-40 +0/-3	30	+105 +3/-0	30	10 milliohms MAXIMUM (change from initial) & Visual: No Damage
Temperature °C	Duration (Minutes)								
-40 +0/-3	30								
+105 +3/-0	30								
8	Humidity (Steady State)	Mate connectors: expose to a temperature of 40 ± 2°C with a relative humidity of 95-100% for 100 hours. Note: Remove surface moisture and air dry for 1 hour prior to measurements.	10 milliohms MAXIMUM (change from initial) & Dielectric Withstanding Voltage: No Breakdown at 500 VAC & Insulation Resistance: 1000 Megohms MINIMUM & Visual: No Damage						

6.0 PACKAGING

Refer to section 3.0 for packing documents

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