Jameco Part Number 803559

PRODUCT SPECIFICATION

2MM DUAL ROW OR SINGLE ROW (SMT/ VERTICAL/ RIGHT ANGLE) HEADER

1.0 SCOPE

This specification covers the performance requirements for 2mm Dual Row or Single Row Header (SMT/ Vertical/ Right Angle)

2.0 PRODUCT DESCRIPTION

2.1 Product covered by this specification is for series number 87752, 87753, 87754 87755, 87756, 87757, 87758, 87759, 87760, 87761, 87762, 87763, 87830 and 87239.

2.2 For dimensions, materials & plating, refer to the appropriate product drawings.

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

The following documents are part of this specification to the extent specified herewith.
In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence.
In the event of conflict between the requirements of this specification and reference documents, this specification shall take the precedence.

MIL-STD-202	Test Methods for Electrical and Electronic Component Parts.
MIL-STD-1344	Test methods of Electrical Connector

4.0 RATINGS

4.1 Voltage : 125V

4.2 Current : 2.00 Amp

4.3 Operating Temperature : -55°C to + 105°C Current

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	**Capacitance**	Measure between adjacent terminals	1.2 pf max
2	**Insulation Resistance**	Test between adjacent contact at 500 V DC for 1 minute, per (MIL-STD-1344 MTD 3001.1)	1000 Megaohms minimum
3	**Dielectric Strength**	Test between adjacent contact at 500VAC rms and 1 minute hold time.	No breakdown

5.2 MECHANICAL REQUIREMENTS

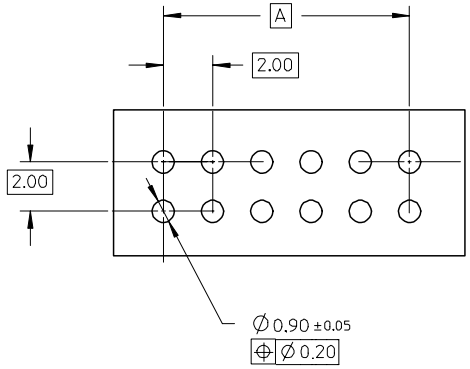
ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
4	**Pin Retention Force in Housing**	Push pin axially from housing at a rate of 12.7mm/min (0.50 inch/min)	0.85 Kgf min

5.3 ENVIRONMENTAL REQUIREMENTS

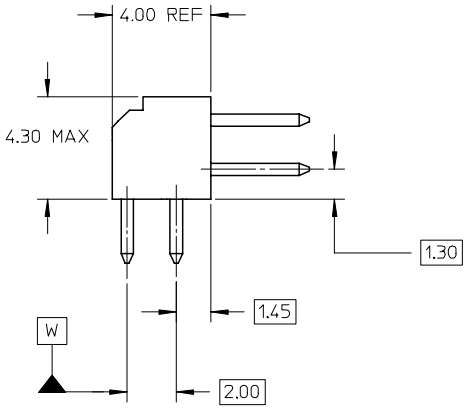
ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5	**Temperature Rise**	Apply 2 amps DC to the header and measure contact temperature rise for 48 hours	30°C maximum temperature rise above ambient.
6	**Solderability**	Solder Time: 5 ± 0.5 sec. Solder Temperature: 245 ±5 °C	Soldertail should have 95% continuous new solder coating coverage (Apply to non-kinked Soldertail only)
7	**Resistance to Soldering Heat (Wave Soldering) For Series** **a)87760,** **b)87758, 87830, 87761** **c) Other series**	Sample mounted on PCB and subject to wave soldering, a)Temperature : 260 ±5 °C for 12 ± 2 Sec b)Temperature : 245 ±5 °C for 3Sec c) Temperature : 245 ±5 °C for 5Sec	Appearance : No Damage
8	**Resistance to Solder Heat (Reflow) For Series 87759, 87762**	Sample mounted on PCB and subject to reflow, Temperature : 245 ±5 °C for 10 ±2 Sec	Appearance : No Damage

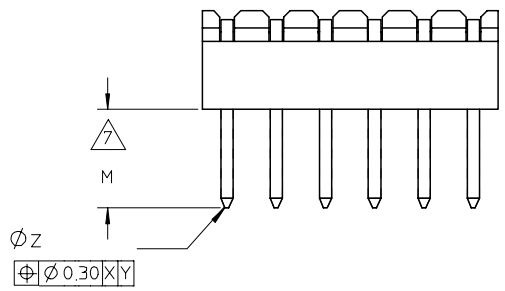
6.0 Packaging

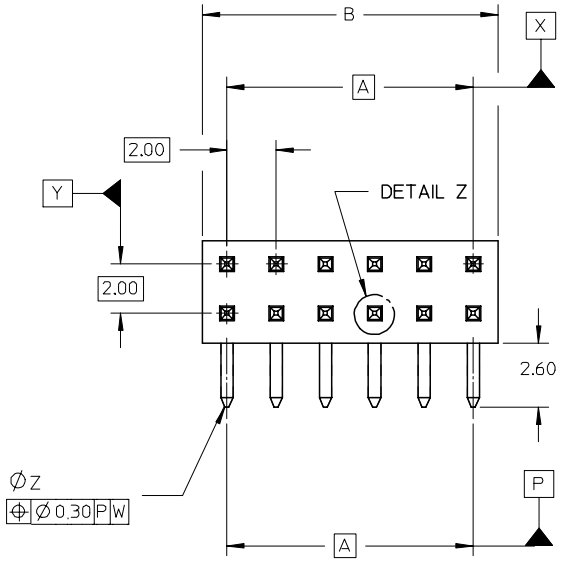
Product shall be packaged and protected against damage during handling, transportation and storage.

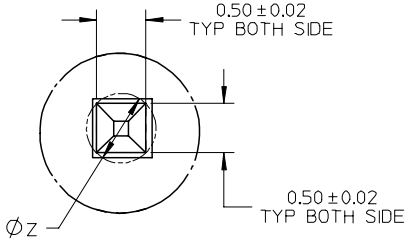


RECOMMENDED PCB LAYOUT









DETAIL Z

NOTES:

1. MATERIAL:
   HSG: PCT, 30% GLASS FILLED,UL 94V-0,
   COLOUR BLACK.
   PIN: 0.50MM SQ PHOSPHOR BRONZE 510

2. PLATING:
   ***6 - 0.38um MIN GOLD IN CONTACT AREA,
   1.90um MIN TIN IN SOLDERTAIL AREA, BOTH OVER
   1.27um MIN NICKEL OVERALL

   ***7 - 0.76um MIN GOLD IN CONTACT AREA,
   1.90um MIN TIN IN SOLDERTAIL AREA, BOTH OVER
   1.27um MIN NICKEL OVERALL

   ***8 - 2.54um MIN TIN OVER
   1.27um MIN NICKEL OVERALL

3. 12 CKT USED FOR ILLUSTRATION ONLY
4. PART TO BE PACKED IN POCKET TRAY.
5. PRODUCT SPEC PS-87761-100 APPLIES.
6. RECOMMENDED PCB BOARD THK 1.60±0.10 MM.
7. MATING LENGTH: 1 - 4.00MM
   2 - 3.50MM
   3 - 3.06MM
   6 - 3.81MM

LEGEND:

87760 - * * * *

- CKT SIZE (SEE SHT 2)
- PLATING OPTION (2) (SEE NOTE 2)
- MATING OPTION (7)

PDR#S-001303-00-00
EC NO: S2006-1212
DRWN:SKANG 2006/06/19
CHKD:MLONG 2006/06/21
APPR:SKTOH 2006/06/22
DESCRIPTION
REV
A5

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.2	± ---
1 PLACE	± ---	± ---

ANGULAR ± 3 °

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: KSEE DATE: 2003/10/15
CHECKED BY: KCLING DATE: 2003/12/02
APPROVED BY: SKTOH DATE: 2003/12/11
MATERIAL NO.: SEE TABLE

TITLE: MGRID, 2MM DUAL ROW HDR. R/A

MOLEX INCORPORATED

DOCUMENT NO.: SD-87760-109
SHEET NO.: 1 OF 2

SIZE A3

PART NUMBER	VOID PIN LOCATION	CKT SIZE	A	B	M
87760-04**	-	04	2.00	4.00	
87760-06**	-	06	4.00	6.00	
87760-08**	-	08	6.00	8.00	
87760-10**	-	10	8.00	10.00	
87760-12**	-	12	10.00	12.00	
87760-14**	-	14	12.00	14.00	
87760-16**	-	16	14.00	16.00	
87760-18**	-	18	16.00	18.00	
87760-20**	-	20	18.00	20.00	REFER TO NOTE 7.
87760-22**	-	22	20.00	22.00	
87760-24**	-	24	22.00	24.00	
87760-26**	-	26	24.00	26.00	
87760-28**	-	28	26.00	28.00	
87760-30**	-	30	28.00	30.00	
87760-32**	-	32	30.00	32.00	
87760-34**	-	34	32.00	34.00	
87760-36**	-	36	34.00	36.00	
87760-38**	-	38	36.00	38.00	
87760-40**	-	40	38.00	40.00	
87760-42**	-	42	40.00	42.00	
87760-44**	-	44	42.00	44.00	
87760-46**	-	46	44.00	46.00	
87760-48**	-	48	46.00	48.00	
87760-50**	-	50	48.00	50.00	
87760-2068	-	20	18.00	20.00	3.81
87760-5116	5, 6 & 26	50	48.00	50.00	4.00

PDR#S-001303-00-00
EC NO: S2006-1212
DRWN:SKANG 2006/06/19
CHKD:MLONG 2006/06/21
APPR:SKTOH 2006/06/22
DESCRIPTION
REV
A5

QUALITY SYMBOLS
▼=0
Ⓒ=0

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ANGULAR ± 3 °

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CHECKED BY: KCLING DATE: 2003/12/02
APPROVED BY: SKTOH DATE: 2003/12/11

TITLE: MGRID, 2MM DUAL ROW HDR. R/A

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87760-109
SHEET NO.: 2 OF 2
SIZE: A3