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ELECTRONICS

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Jameco Part Number 2031353

## 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 78014, 87752, 87753, 87754, 87755, 87756, 87757, 87758, 87759, 87760, 87761, 87762, 87763, 87830, 87239, 87858, and 87979

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

REVISION:  <b>B6</b>	ECR/ECN INFORMATION: <u>EC No:</u> <b>S2007-1103</b> <u>DATE:</u> <b>2007/06/15</b>	TITLE: <b>2MM DUAL ROW OR SINGLE ROW (SMT/ VERTICAL/ RIGHT ANGLE) HEADER</b>		SHEET No.  <b>1 of 4</b>
DOCUMENT NUMBER: <b>PS-87761-100</b>		CREATED / REVISED BY: <b>AI TING/CWLAM 2007/06/15</b>	CHECKED BY: <b>KWLEE 2007/06/15</b>	APPROVED BY: <b>KW LEE 2007/06/15</b>



# PRODUCT SPECIFICATION

## 5.0 PERFORMANCE

### 5.1 ELECTRICAL REQUIREMENTS

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

### 5.2 MECHANICAL REQUIREMENTS

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

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## 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 : 260 ±5 °C for 10+2/-0Sec  c) Temperature : 245 ±5 °C for 5Sec	Appearance : No Damage
8	Resistance to Solder Heat (Reflow) For SMT Series 87753, 87756, 87759, 87762, 87763, 87858, 87979, 87830	Pass Jack through IR machine for 3 cycles of the following reflow profile:  Average Ramp Rate                      3°C/sec max. Preheat Temp. (Min.)                    150°C Preheat Temp. (Max.)                    200°C Preheat Time                                60 – 180 sec Ramp to Peak                                3°C/sec max. Time over liquidus (217°C)              60 – 150 sec Peak Temperature                         260 +0/-5°C Time within 5°C of peak                 20 – 40 sec. Ramp – Cool Down                        6°C/sec max. Time 25°C to Peak                         8 mins max.	Appearance : No Damage

## 6.0 Packaging

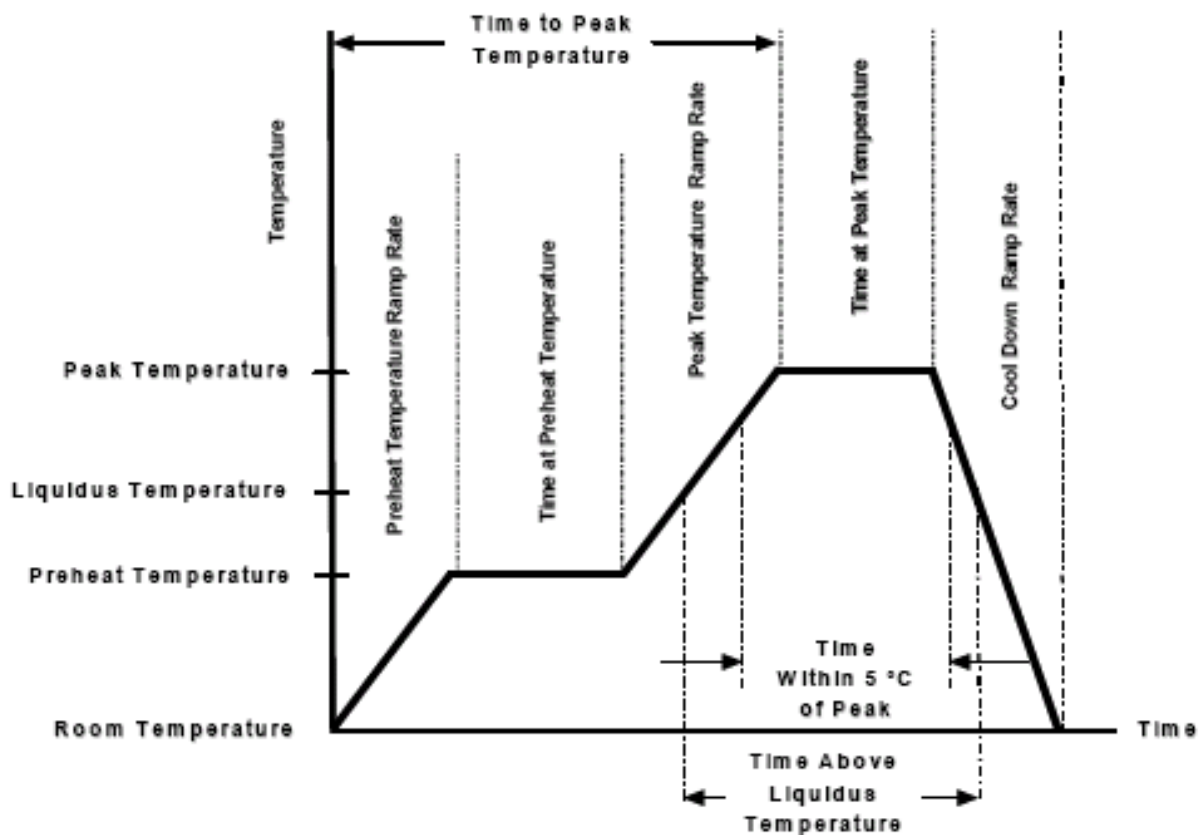
Product shall be packaged and protected against damage during handling, transportation and storage.

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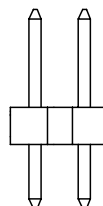
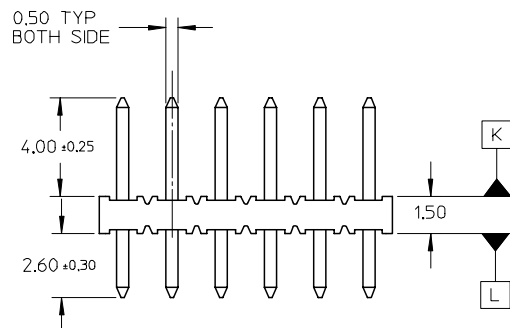
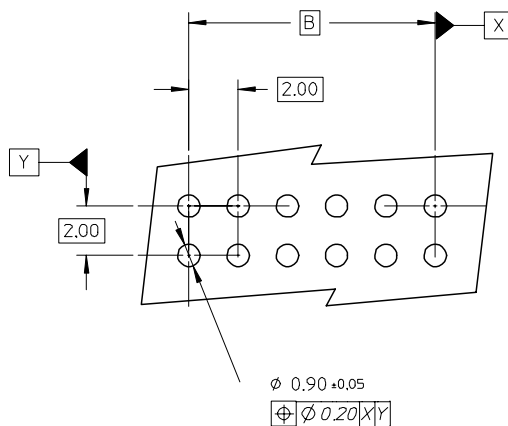
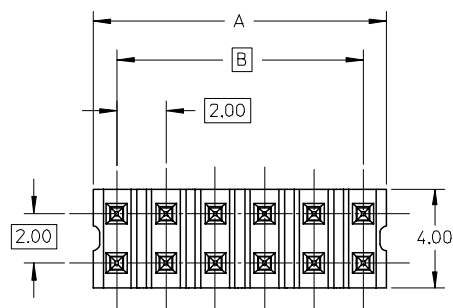


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## 7.0 SURFACE MOUNT REFLOW TEMPERATURE PROFILE



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**LEGEND**  
87758- \* \* \* \*  
CKT SIZE (SEE SHT 2 TABLE) PLATING (SEE NOTE 2)

#### NOTES:

##### 1. MATERIAL:

HOUSING: 30% G.F. NYLON 46, 94V-0, COLOR: BLACK  
PIN: 0.50mm SQ. PHOSPHOR BRONZE 510

##### 2. PLATING:

\*\*16 - 0.38um MIN GOLD IN CONTACT AREA.  
TIN IN SOLDER AREA, BOTH OVER  
NICKEL OVERALL.  
\*\*17 - 0.76um MIN GOLD IN CONTACT AREA.  
TIN IN SOLDER AREA, BOTH OVER  
NICKEL OVERALL.  
\*\*18 - 2.54um MIN TIN OVER  
NICKEL OVERALL.

##### 3. 12 CKT USED FOR ILLUSTRATION ONLY

##### 4. PACKED IN POCKET TRAY

##### 5. PIN PUSHOUT FORCE: 1KG MIN IN EITHER DIRECTION

6. CKT 4 AND 6 IS CUT FROM CKT 8 AND 12 RESPECTIVELY.  
CKT 2 ARE CUT FROM ANY LARGER CKT SIZE.ROUGH EDGES  
ARE EXPECTED ALONG THE CUTTING EDGES.

##### 7. PRODUCT SPEC PS-87761-100 APPLIES.

##### 8. RECOMMENDED PCB THICKNESS IS 1.60±0.10

0.71 ± 0.07  
0.30 ± 0.07



VIEW P

0.71 ± 0.07  
0.30 ± 0.07



VIEW Q

QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
▽=0		mm		INCH		DRAWN BY KSEE		DATE 2003/10/30	
▽C=0		4 PLACES		± ---		CHECKED BY KCL ING		DATE 2004/01/05	
		3 PLACES		± ---		APPROVED BY SKTOH		DATE 2004/01/05	
		2 PLACES		± 0.20		MATERIAL NO.		DOCUMENT NO.	
		1 PLACE		± ---		SEE TABLE		SD-87758-107	
		ANGULAR		± 3 °		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SHEET NO. 1 OF 2	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3					

