Jameco Part Number 1978377

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

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

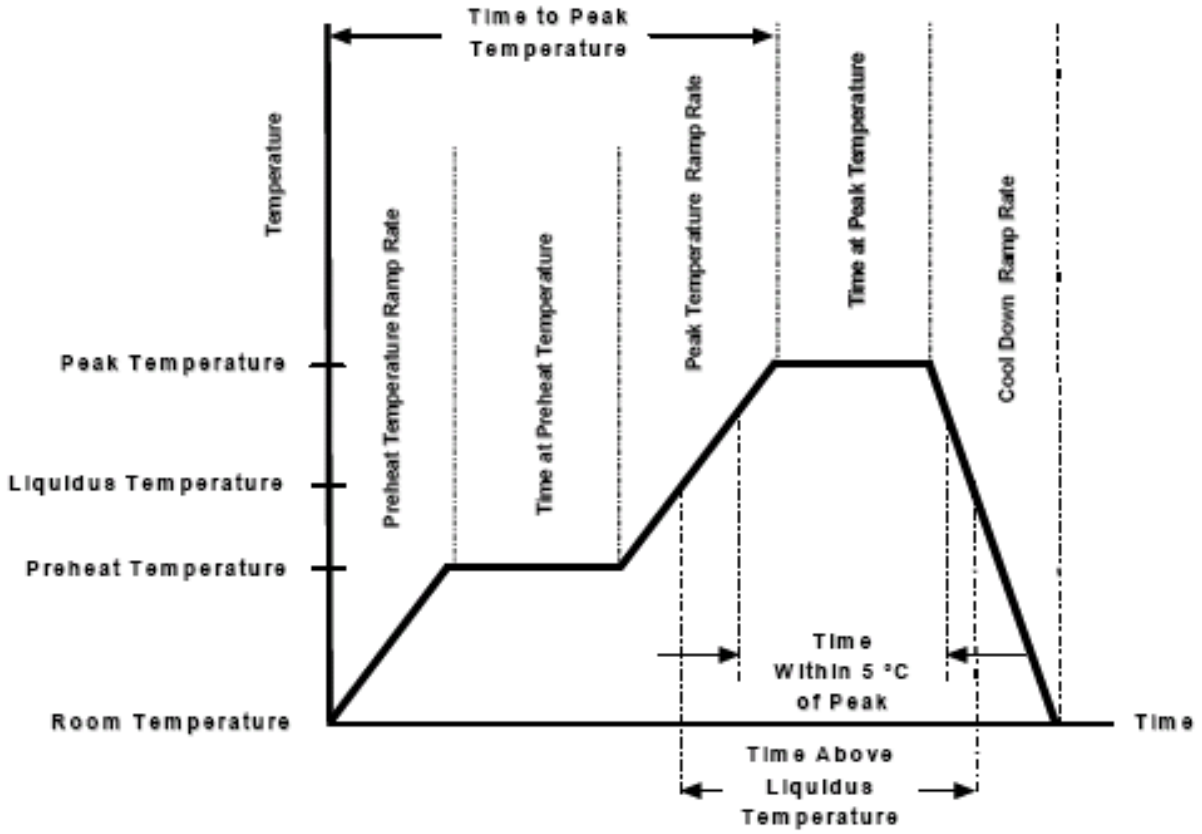
5.3 ENVIRONMENTAL REQUIREMENTS

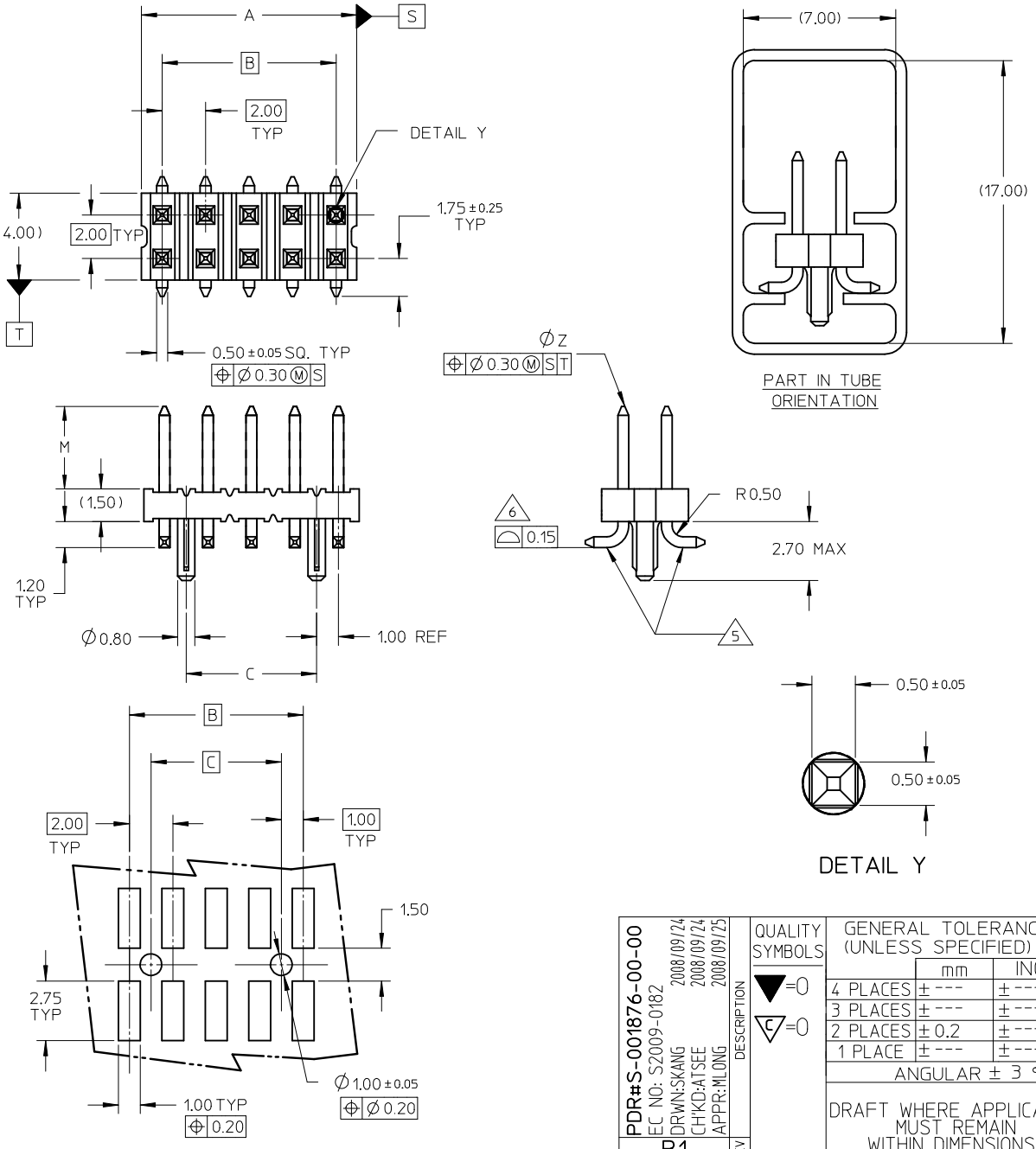
ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5	**Temperature Rise**	Apply 2 amps DC to the header and measure contact temperature rise for 48 hours	30°C maximum temperature rise above ambient.
6	**Solderability**	Solder Time: 5 ± 0.5 sec. Solder Temperature: 245 ±5 °C	Soldertail should have 95% continuous 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 : 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.

7.0 SURFACE MOUNT REFLOW TEMPERATURE PROFILE





NOTE:

1. MATERIAL:
   HSG - HIGH TEMPERATURE THERMOPLASTIC, UL 94V-0, COLOUR BLACK
   PIN - 0.50 SQ PHOSPHOR BRONZE
2. PLATING:
   **50 / **52 - 0.38um MIN GOLD PLATE AT CONTACT AREA, TIN PLATE AT SOLDER AREA, BOTH OVER NICKEL UNDERPLATE
   **51 - 0.76um MIN GOLD PLATE AT CONTACT AREA, TIN PLATE AT SOLDER AREA, BOTH OVER NICKEL UNDERPLATE
   (** - REPRESENTS DIFFERENT CKT SIZE , SEE TABLE AT SHT 2)
3. PIN PUSHOUT FORCE: 1KG MIN IN EITHER DIRECTION
4. PRODUCT SPEC PS-87761-100 APPLIES.
5. BEND DEPRESSION IS ACCEPTABLE SO LONG AS IT DOES NOT AFFECT THE OVERALL COPLANARITY OF TAIL.
6. COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDERTAIL ON A FLAT SURFACE.
7. FOR ILLUSTRATION PURPOSES, 10CKT IS SHOWN
8. TUBE LENGTH IS 560MM REF STANDARD.
9. RECOMMENDED PCB BOARD THK IS 1.60± 0.10 MM.

PDR#S-001876-00-00
EC NO: S2009-0182
DRWN:SKANG 2008/09/24
CH'KD:ATSEE 2008/09/24
APPR:MLONG 2008/09/25
DESCRIPTION
REV
B1

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: 2003/12/24
CHECKED BY: KCLING DATE: 2004/01/12
APPROVED BY: SKTOH DATE: 2004/01/12

TITLE: CUSTOM HEADER MGRID, 2MM DUAL ROW HDR WITH PEG, SMT

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87759-113
SHEET NO.: 1 OF 2

SIZE A3

PART NUMBER WITHOUT CAP IN TUBE	CKT SIZE	A	B	C	M
87759-0850/0851	08	7.90	6.00	4.00	3.80
87759-0852	08	7.90	6.00	4.00	9.60
87759-1050/1051	10	9.90	8.00	6.00	3.80
87759-1250/1251	12	11.90	10.00	8.00	3.80
87759-1450/1451	14	13.90	12.00	10.00	3.80
87759-1650/1651	16	15.90	14.00	12.00	3.80
87759-1850/1851	18	17.90	16.00	14.00	3.80
87759-2050/2051	20	19.90	18.00	16.00	3.80
87759-2250/2251	22	21.90	20.00	18.00	3.80
87759-2450/2451	24	23.90	22.00	20.00	3.80
87759-2650/2651	26	25.90	24.00	22.00	3.80
87759-2850/2851	28	27.90	26.00	24.00	3.80
87759-3050/3051	30	29.90	28.00	26.00	3.80
87759-3250/3251	32	31.90	30.00	28.00	3.80
87759-3450/3451	34	33.90	32.00	30.00	3.80
87759-3650/3651	36	35.90	34.00	32.00	3.80
87759-3850/3851	38	37.90	36.00	34.00	3.80
87759-4050/4051	40	39.90	38.00	36.00	3.80
87759-4250/4251	42	41.90	40.00	38.00	3.80
87759-4450/4451	44	43.90	42.00	40.00	3.80
87759-4650/4651	46	45.90	44.00	42.00	3.80
87759-4850/4851	48	47.90	46.00	44.00	3.80
87759-5050/5051	50	49.90	48.00	46.00	3.80

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molex MOLEX INCORPORATED

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SHEET NO.: 2 OF 2
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