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ELECTRONICS

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Jameco Part Number 1303521



## 1.0 SCOPE

## 2.0 PRODUCT DESCRIPTION

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

## MIL-STD-1344 Test methods of Electrical Connector

4.1 Voltage : 125V

4.2 Current : 2.00 Amp

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

<u>REVISION:</u> <div style="font-size: 24pt; font-weight: bold; text-align: center;">B1</div>		<u>ECR/ECN INFORMATION:</u> <u>EC No:</u> <b>S2004-0868</b> <u>DATE:</u> <b>2004/07/20</b>		<u>TITLE:</u> <div style="text-align: center; font-weight: bold;">2MM DUAL ROW OR SINGLE ROW (SMT/ VERTICAL/ RIGHT ANGLE) HEADER</div>		<u>SHEET No.</u> <div style="text-align: center; font-weight: bold;">1 of 3</div>			
<u>DOCUMENT NUMBER:</u> <div style="text-align: center; font-weight: bold;">PS-87761-100</div>				<u>CREATED / REVISED BY:</u> <div style="text-align: center; font-weight: bold;">AI TING</div>		<u>CHECKED BY:</u> <div style="text-align: center; font-weight: bold;">KCLING</div>		<u>APPROVED BY:</u> <div style="text-align: center; font-weight: bold;">SKTOH</div>	

TEMPLATE FILENAME: PRODUCT SPEC SIZE A4(V.1) DOC



# 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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DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
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# PRODUCT SPECIFICATION

## 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

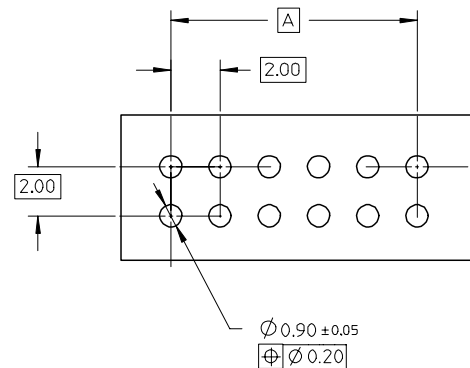
Product shall be packaged and protected against damage during handling, transportation and storage.

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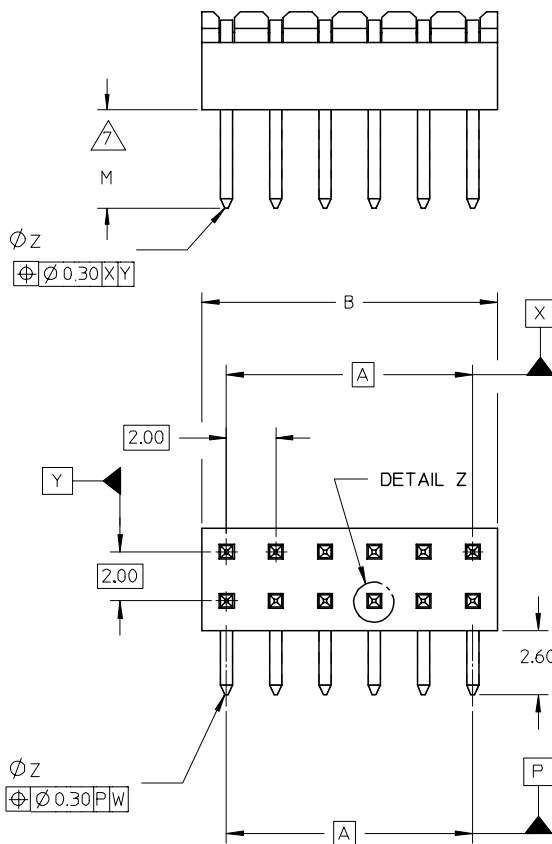
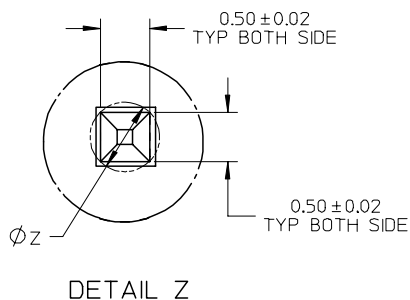
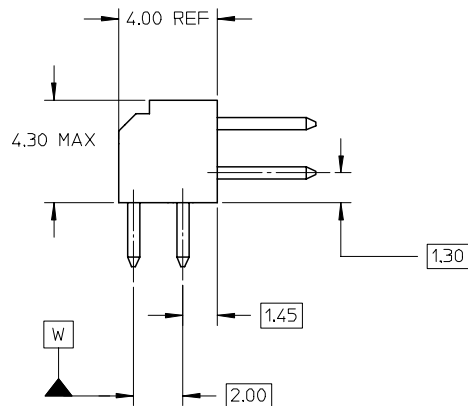
10 9 8 7 6 5 4 3 2 1

F

F



RECOMMENDED PCB LAYOUT



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 SOLDER TAIL AREA, BOTH OVER 1.27um MIN NICKEL OVERALL

\*\*\*7 - 0.76um MIN GOLD IN CONTACT AREA, 1.90um MIN TIN IN SOLDER TAIL 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 $\pm$ 0.10 MM.

MATING LENGTH: 1 - 4.00MM  
2 - 3.50MM  
3 - 3.06MM

LEGEND:

87760 - \* \* \* \*  
CKT SIZE (SEE SHT 3) \* \* \* \*  
PLATING OPTION (SEE NOTE 2) \*  
MATING OPTION \*

REVISED EC NO: S2007-0674 DRWN:SKANG CHKD:GENARLY APPR:MLONG A7	DESCRIPTION 2007/02/01 2007/02/01 2007/02/01 2007/02/02	QUALITY SYMBOLS  ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION
				mm	INCH	DRAWN BY KSEE	DATE 2003/10/15	TITLE MGRID, 2MM DUAL ROW HDR. R/A		
			4 PLACES	± ---	± ---	CHECKED BY	DATE			
			3 PLACES	± ---	± ---	KCL ING	2003/12/02			
			2 PLACES	± 0.2	± ---	APPROVED BY	DATE			
			1 PLACE	± ---	± ---	SKTOH	2003/12/11	 MOLEX INCORPORATED		
			ANGULAR ± 3 °			MATERIAL NO.		DOCUMENT NO.	SHEET NO.	
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE		SD-87760-109		
REV			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

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