

ENGINEERING DEPT.

PRODUCT SPECIFICATION For CI77 Series of 3.96mm Pitch

SPEC.NO.: SPCI018H

- **REVISIONS** ECNT121010
- Breakaway Pin Header

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1. SCOPE:

This specification contains the test requirement of subject connectors when tested under the condition and procedure with terminals crimped on the specified maximum size wire

2. APPLICABLE STANDARDS:

MIL - STD - 202Methods for test of connectors for electronic equipmentEIA - 364Test methods for electrical connectors

- 3. APPLICABLE SERIES NO.: CI77 Series
- 4. SHAPE, CONSTRUCTION AND DIMENSIONS See attached drawings
- 5. MATERIALS See attached drawings
- 6. ACCOMMODATED P.C.BOARD6.1 Thickness: 1.6 mm (.063")6.2 P.C. Board Layout: See attached drawings



REVIEWED : <u>Eisley</u> APPROVED : <u>Sun</u> VERIFIED : <u>Eric</u>.



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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		7A 250V AC (r.m.s.)
7.2	Contact resistance	Dry circuit of DC 20 mV max., 100 mA max.	Less than $10 \text{ m}\Omega$
7.3	Dielectric strength	When applied AC 1500 V 1 minute between adjacent terminal	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 1000 M Ω

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Pin retention force	Push pin from insulator base at speed	More than 3.0 Kgf
		25± 3 mm per minute	

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Solder ability	Tin-Lead Process:	Minimum:
		Soldering time: 5 ± 0.5 second	90% of immersed area
		Soldering pot: $230 \pm 5 \degree C$	
9.2	Resistance to soldering heat	Tin-Lead Process:	No damage
		Soldering time: 5 ± 0.5 second	
		Soldering pot: 240 ± 5 °C	
9.3	Heat aging	$105 \pm 2^{\circ}$ C, 96 hours	No damage
9.4	Humidity	40 ± 2°C , 90-95% RH , 96 hours measurement must be taken within 30 min. after tested	Appearance: No damage Contact resistance: Less than twice of initial Dielectric strength: To pass para 7-3



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	ITEM	TEST CONDITION	REQUIREMENT
9.5	Temperature cycling	One cycle consists of : (1) $-55 \frac{+0}{-3}$ °C, 30 min.	Appearance: No damage Contact resistance:
		(2)Room temp. 10-15 min. (3) $85 \frac{+3}{-0}$ °C , 30 min.	Less than twice of initial
		(4)Room temp. 10-15 min.	
9.6	Salt spray	Temperature: $35 \pm 3^{\circ}C$	Appearance: No damage
		Solution: $5 \pm 1\%$	Contact resistance:
		Spray time: 48 ± 4 hours	Less than twice of initial
		(Stamping before plated)	
		Spray time: 24 ± 4 hours	
		(Stamping after plated)	
		Mate connectors and expose to the following salt mist conditions. Upon completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water and dried naturally, after which the specified measurements shall be performed.	
		The specimens shall be suspended from the top using waxed twine, string or nylon thread.	
		The test only define the plating area, without plating area (as copper cross section) will not be defined. (EIA 364-26B / MIL-STD-202 Method 101)	

10. AMBIENT TEMPERATURE RANGE: -40 to +105 °C