

ENGINEERING DEPT.PRODUCT SPECIFICATION
For CI83 Series Friction Lock Breakaway
Header SystemSPEC.NO.: SPCI027E

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 - 202 Methods for test of connectors for electronic equipment

MIL - STD - 1344 Test methods for electrical connectors

3. APPLICABLE SERIES NO.: CI83 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED P.C.BOARD

6.1 Thickness: 1.6 mm (.063")

6.2 P.C. Board Layout: See attached drawings



REVIEWED: <u>David</u> APPROVED: <u>Eisley</u> VERIFIED: <u>Sandy</u>.



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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		5A 250V AC (r.m.s.)
7.2	Contact resistance	Dry circuit of DC 20 mV max., 100 mA max.	Less than 20 m Ω
7.3	Dielectric strength	When applied AC 1000 V 1 minute between adjacent terminal	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than $1000 \text{M}\Omega$

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Pin retention force	Push pin from insulator base at speed	More than 1.5 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 ± 5°C	
9.2	Resistance to soldering	Tin-Lead Process:	No damage
	heat	Soldering time: 5 ± 0.5 second	
		Soldering pot: 240 ± 5°C	
9.3	Heat aging	105 ± 2°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
9.5	Temperature cycling	One cycle consists of: (1)-55 +0 °C, 30 min. (2)Room temp. 10-15 min. (3) 85 +3 °C, 30 min. (4)Room temp. 10-15 min.	Appearance: No damage Contact resistance: Less than twice of initial



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	ITEM	TEST CONDITION	REQUIREMENT
9.6	Salt spray	Temperature: 35 ± 3°C	Appearance: No damage
		Solution: 5 ± 1%	Contact resistance:
		Spray time: 48 ± 4 hours	Less than twice of initial
		Measurement must be taken after water rinse	

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