

ENGINEERIN	G DEPT.	PRODUCT SPECIFICATION	SPEC.NO.:	SPCI124A
REVISIONS	ECNT115097	For CIL4 Connectors	PAGE:	1/3

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:

Methods for test of connectors for electronic equipment

Test methods for electrical connectors

MIL - STD - 1344 J-STD-020 SS-00254 Resistance to soldering Temperature for through hole Mounted Devices Test methods for electronic components ,LEAD-FREE soldering Part design SS-00254

standards

3. APPLICABLE SERIES NO.: CIL4 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED P.C.BOARD

6.1 P.C. Board Layout: See attached drawings



REVIEWED: <u>Eisley</u> APPROVED: <u>Eisley</u> VERIFIED: <u>Clark</u>.



ENGINEERIN	G DEPT.	PRODUCT SPECIFICATION	SPEC.NO.:	SPCI124A
REVISIONS	ECNT115097	For CIL4 Connectors	PAGE:	2/3

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		1.0A 200V AC (r.m.s)
7.2	Contact resistance	Dry circuit of DC 20 mV max., 100mA max.	Less than 30 mΩ
7.3	Dielectric strength	When applied AC 1400 V (rms) 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	Insertion Force	Measured force to insert PCB into the conn. at the speed rate of 25± 3 mm per minute	Less than 1.0 kgf
8.2	Withdrawal Force	Measured force to withdraw PCB into the conn. at the speed rate of 25± 3 mm per minute	More than 0.1 kgf
8.3	Pin retention force	Push Pin for insulator base at speed 25± 3 mm per minute	More than 0.1 kgf
8.4	Durability	Connector shall be subjected to 30 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Vibration	1.5 mm 10-55-10 HZ/minute each 2 hours for X, Y and Z directions	Appearance: No damage Discontinuity: 1 micro second max.
9.2	Heat aging	85± 2°C, 96 hours	Appearance: No damage Contact resistance: Less than twice of initial
9.3	Humidity	40± 2°C, 90-95% RH, 96 hours measurement must be taken within 5 hour after tested	Appearance: No damage Contact resistance: Less than twice of initial Dielectric strength: To pass para 7-3



ENGINEERIN	G DEPT.	PRODUCT SPECIFICATION	SPEC.NO.:	SPCI124A
REVISIONS	ECNT115097	For CIL4 Connectors	PAGE:	3/3

	ITEM	TEST CONDITION	REQUIREMENT	
9.4	Temperature cycling	One cycle consists of: (1) -55 +0 °C, 30 min. (2) Room temp. 5 min. (3) 85 +3 °C, 30 min.	Appearance: No damage Contact resistance: Less than twice of initial	
		(4) Room temp. 5 min. Total cycles : 5 cycles		
9.5	Salt spray	Temperature: 35+1/-2°C	Appearance: No damage	
		Solution: 5%	Contact resistance:	
		Spray time: 48 hours	Less than twice of initial	
		Measurement must be taken after water rinse		
9.6	Solder ability	Lead-Free Process:	Appearance: No damage	
		Soldering time: 3 ± 0.5 second	Minimum:	
		Soldering pot: 245 ± 5°C	95% of immersed area	
9.7	Resistance to soldering heat	Lead-Free Process for SMT Type: Refer Reflow temperature profile	No damage	

10. AMBIENT TEMPERATURE RANGE: -25 to +85°C

11. Recommended IR Reflow Temperature Profile:

11.1 Using Lead-Free Solder Paste

