

ENGINEERING	PRODUCT SPECIFICATION	SPEC.NO.:	SPCI1221
DEPT.	For CID1 Series Connector System	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:

MIL - STD - 202 MIL - STD - 1344 Methods for test of connectors for electronic equipment

Test methods for electrical connectors

3. APPLICABLE SERIES NO: CID1 Series

# 4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

#### 5. MATERIALS

See attached drawings

#### 6. ACCOMMODATED P.C.BOARD

6.1 Thickness:  $0.6 \text{ mm} (.024'') \sim 1.2 \text{ mm} (.047''), 1.6 \text{mm} (.063'')$ 

6.2 P.C. Board Layout: See attached drawings



REVIEWED: David APPROVED: Eisley VERIFIED: Hank.



ENGINEERING	PRODUCT SPECIFICATION	SPEC.NO.:	SPCI1221
DEPT.	For CID1 Series Connector System	PAGE:	2/3

# 7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		(AWG#18 OD:0.80mm)
			9.0A AC (r.m.s.)/DC
			300V AC (r.m.s.)/DC
7.2	Contact resistance	Dry circuit of DC 20 mV max., 100 mA max.	Less than $20 \text{ m}\Omega$
7.3	Dielectric strength	When applied AC 1600 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	Single contact withdrawal force	Measure force to withdrawal using diameter 0.80mm solid wire at speed 25± 3 mm per minute	2.0 Kgf min.

# 9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Vibration	1.5 mm 10-55-10 HZ / minute each	Appearance: No damage
		2 hours for X, Y and Z directions	Discontinuity:
		(MIL-STD-202,method 201A)	1 micro second max.
9.2	Solder ability	Lead-Free Process for SMT Type:	Minimum:
		Soldering time: 3 ± 0.5 second	90% of immersed area
		Soldering pot: 245 ± 5°C	
9.3	Resistance to soldering heat	Refer Reflow temperature profile	No damage
9.4	Heat aging	85 ± 2°C , 96 hours(JIS C0021/MIL-STD-	No damage
		202,method 108A,condition A)	Contact resistance:
			Less than twice of initial



ENGINEERING	PRODUCT SPECIFICATION	SPEC.NO.:	SPCI1221
DEPT.	For CID1 Series Connector System	PAGE:	3/3

	ITEM	TEST CONDITION	REQUIREMENT
9.5	Humidity	60 ± 2°C , 90-95% RH , 96 hours measurement must be taken within 30 min. after tested (JIS C0020/MIL-STD-202, method 103 B, condition B)	Appearance: No damage Contact resistance: Less than twice of initial Insulation resistance: To pass Para 7-4
9.6	Temperature cycling	Five cycle consists of :(JIS C0025)  (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
9.7	Salt spray	Temperature: 35 ± 2°C Solution: 5 ± 1% Spray time: 48 ± 4 hours Measurement must be taken after water rinse(JIS C5028/MIL-STD-202, method 101 D, condition B)	Appearance: No damage Contact resistance: Less than twice of initial

## 10. AMBIENT TEMPERATURE RANGE: -35 to + 105°C

- 11. Recommended IR Reflow Temperature Profile:
- 11.1 Using Lead-Free Solder Paste

