

ENGINEERING DEPT.		PRODUCT SPECIFICATION For CF16 Series Connector System	SPEC.NO.: SPCF017G
REVISIONS	ECN11064		PAGE: 1/4

1. SCOPE:

This specification contains the test requirement of subject connectors when tested under the condition and Inserted on the specified size FPC and FFC

2. APPLICABLE STANDARDS:

MIL - STD - 202	Methods for test of connectors for electronic equipment
MIL - STD - 1344	Test methods for electrical connectors
J-STD-020	Resistance to soldering Temperature for through hole Mounted Devices
SS-00254	Test methods for electronic components ,LEAD-FREE soldering Part design standards

3. APPLICABLE SERIES NO.: **CF16 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

7. ACCOMMODATED FPC/FFC THICKNESS

0.3 +0.04/-0.01 mm (.012+.002/-0")



REVIEWED : Eisley APPROVED : Clark VERIFIED : Sandy.

ENGINEERING DEPT.		PRODUCT SPECIFICATION For CF16 Series Connector System	SPEC.NO.: SPCF017G
REVISIONS	ECN11064		PAGE: 2/4

8. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Rated current and voltage		0.5 A 100V AC (r.m.s.)
8.2	Contact resistance	Dry circuit of DC 20 mV max., 100 mA max.	Less than 30 mΩ
8.3	Dielectric strength	When applied AC 500 V 1 minute between adjacent terminal	No change
8.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 500 MΩ

9. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Contact retaining force in insulator	Retention speed 25± 3 mm per minute from housing	More than 0.3 Kgf
9.2	FPC / FFC withdrawal force (Reference data)	Measure force to withdrawal using 0.30 mm thickness FPC/FFC at speed 25± 3 mm per minute	50 × No. of Circuits gram Min
9.3	Durability	Connector shall be subjected to 20 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial

10. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
10.1	Temperature rise	Then carried the rated current	30°C Max.
10.2	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.

ENGINEERING DEPT.		PRODUCT SPECIFICATION For CF16 Series Connector System	SPEC.NO.: SPCF017G
REVISIONS	ECN11064		PAGE: 3/4

	ITEM	TEST CONDITION	REQUIREMENT
10.3	Solder ability	<p>Tin-Lead Process: Soldering time: 5 ± 0.5 second Soldering pot: $230 \pm 5^{\circ}\text{C}$</p> <p>Lead-Free Process: Soldering time: 3 ± 0.5 second Soldering pot: $245 \pm 5^{\circ}\text{C}$</p>	Minimum: 90% of immersed area
10.4	Resistance to soldering heat	<p>DIP Type Tin-Lead Process: Soldering time: 5 ± 0.5 second Soldering pot: $240 \pm 5^{\circ}\text{C}$</p> <p>DIP Type Lead-Free Process: Soldering time: 5 ± 0.5 second Soldering pot: $260 \pm 5^{\circ}\text{C}$</p> <p>SMT Type Tin-Lead Process: Refer Reflow temperature profile(12.1) Soldering time: 10 second Max. Soldering pot: $230 \pm 5^{\circ}\text{C}$</p> <p>SMT Type Lead-Free Process: Soldering time: 20 second Max. Soldering pot: $250\sim 260^{\circ}\text{C}$ Refer Reflow temperature profile(12.2)</p>	No damage
10.5	Heat aging	$105 \pm 2^{\circ}\text{C}$, 96 hours	No damage
10.6	Humidity	$40 \pm 2^{\circ}\text{C}$, 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 8-3
10.7	Temperature cycling	One cycle consists of : (1) -55_{-3}^{+0} $^{\circ}\text{C}$, 30 min. (2) Room temp. 10-15 min. (3) 85_{-0}^{+3} $^{\circ}\text{C}$, 30 min. (4) Room temp. 10-15 min.	Appearance: No damage Contact resistance: Less than twice of initial

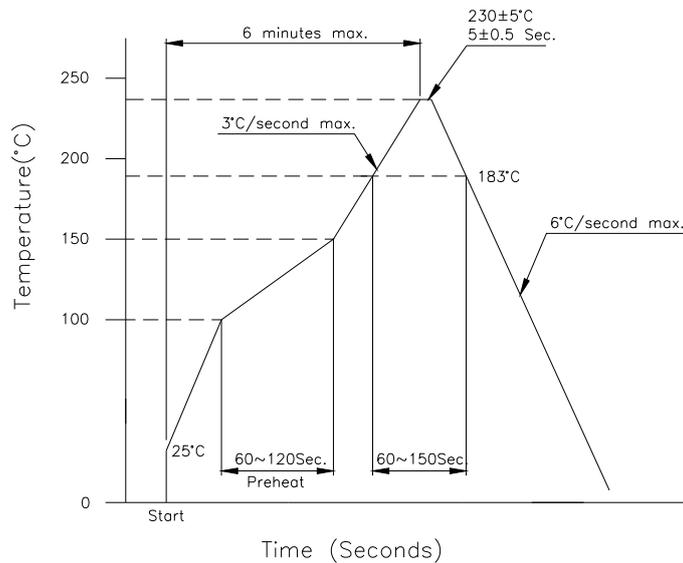
ENGINEERING DEPT.		PRODUCT SPECIFICATION For CF16 Series Connector System	SPEC.NO.: SPCF017G
REVISIONS	ECN11064		PAGE: 4/4

ITEM	TEST CONDITION	REQUIREMENT
10.8	Salt spray Temperature: $35 \pm 3^{\circ}\text{C}$ Solution: $5 \pm 1\%$ Spray time: 48 ± 4 hours Measurement must be taken after water rinse	Appearance: No damage Contact resistance: Less than twice of initial

11. AMBIENT TEMPERATURE RANGE: -40 to $+105^{\circ}\text{C}$

12. Recommended IR Reflow Temperature Profile:

12.1 Using Typical Solder Paste



12.2 Using Lead-Free Solder Paste

