ENGINEERING DEPT.		PRODUCT SPECIFICATION	SPEC.NO.:	SPCF049A
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#### 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 SS-00254 Resistance to soldering Temperature for through hole Mounted Devices

Test methods for electronic components ,LEAD-FREE soldering Part

design standards

3. APPLICABLE SERIES NO.: CF25\*\*1D0\*D(E)-05-NH, CF25\*\*1D0\*D(E)-10-NH

# 4. SHAPE, CONSTRUCTION AND DIMENSIONS See attached drawings

# 5. MATERIALS

See attached drawings

## 6. ACCOMMODATED P.C.BOARD

6.1 Thickness: 0.5 mm (.020") ~ 2.0 mm (.079") 6.2 P.C. Board Layout: See attached drawings

#### 7. ACCOMMODATED FPC/FFC THICKNESS

0.29~0.34 mm (.011"~.013")



REVIEWED: Esky	APPROVED: C/m/k	VERIFIED: Steven.

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# PRODUCT SPECIFICATION

For CF25 Series Connector System

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## 8. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Rated current and		For 0.5mm Pitch:
	voltage		0.5A max.
			/50V AC/DC max.
			For 1.0mm Pitch:
			1.0A max.
			100V AC/DC max.
8.2	Contact resistance	Dry circuit of DC 20 mV max., 1 mA max.	Less than 50 m $\Omega$
8.3	Dielectric strength	For 0.5mm Pitch:	No change
	·	When applied AC 150 V 1 minute between adjacent terminal	
		For 1.0mm Pitch:	_
		When applied AC 500 V 1 minute between adjacent terminal	
8.4	Insulation resistance	When applied DC 100 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 0.2 Kgf
9.2	FFC / FPC withdrawal force (Reference data)	Measure force to withdrawal using 0.30 mm thickness FPC / FFC at speed $25\pm3$ mm per minute	(0.07× no. of Contacts +2.0Kgf) Kgf min.
9.3	Durability	Connector shall be subjected to 20 cycles of insertion and withdrawal	No damage 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.

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	ITEM	TEST CONDITION	REQUIREMENT
10.3	Solder ability	Soldering time: 3 ± 0.5 second	Minimum:
		Soldering pot: 245 ± 5 °C	90% of immersed area
10.4	Resistance to	Soldering time: 20 second Max.	No damage
	soldering heat	Soldering pot: 250~260°C	,
10.5	Heat aging	105 ± 2°C , 96 hours	No damage
10.6	Humidity	40 ± 2°C, 90-95% RH, 96 hours	Appearance: No damage
		measurement must be taken within 30 min.	Contact resistance:
		after tested	Less than twice of initial Dielectric strength:
			To pass para 8-3
10.7	Temperature cycling	One cycle consists of:	Appearance: No damage
		$(1) -55^{+0}_{-3}$ °C, 30 min.	Contact resistance:
		(2)Room temp. 10-15 min.	Less than twice of initial
		(3) $85^{+3}_{-0}$ °C, 30 min.	
		(4)Room temp. 10-15 min.	
10.8	Salt spray	Temperature: 35 ± 3 ° C	Appearance: No damage
		Solution: 5 ± 1%	Contact resistance:
		Spray time: $48 \pm 4$ hours	Less than twice of initial
		Measurement must be taken after water rinse	

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

## 12. Recommended IR Reflow Temperature Profile(Lead-Free):

