




APPLICABLE STANDARD					
RATING	Operating temperature range	-55 °C to 125 °C (note 1)	Storage temperature range	-10°C TO 50°C(Packed condition)	
	Voltage	50V AC / DC	Operating or storage humidity range	Relative humidity 90% MAX(Not dewed)	
	Current	0.50 A	Applicable cable (FPC/FFC)	t=0.30±0.05mm, Gold plating	
SPECIFICATIONS					
ITEM	TEST METHOD		REQUIREMENTS	QT	AT
CONSTRUCTION					
General examination	Visually and by measuring instrument.		According to drawing.	X	X
Marking	Confirmed visually.			X	X
ELECTRICAL CHARACTERISTICS					
Voltage proof	150 V AC for 1 min.		No flashover or breakdown.	X	—
Insulation resistance	100 V DC.		500 MΩ MIN.	X	—
Contact resistance	AC 20 mV MAX , 1 mA .		Initial:50 mΩ MAX、 After each test:70 mΩ MAX (Including FPC/FFC bulk resistance L=8mm)	X	—
MECHANICAL CHARACTERISTICS					
Vibration	Frequency 10 to 55 Hz, half amplitude 0.75 mm, for 10 cycles in 3 axial directions.		① No electrical discontinuity of 1 μs. ② Contact resistance: 70 mΩ MAX	X	—
Shock	981 m/s ² , duration of pulse 6 ms at 3 times in 3 both axial directions.		③ No damage, crack and looseness of parts.	X	—
Mechanical operation	10 times insertions and extractions.		① Contact resistance: 70 mΩ MAX ② No damage, crack and looseness of parts.	X	—
FPC/FFC retention force	Measured by applicable FPC/FFC. (Thickness of FPC/FFC shall be t=0.30mm at initial condition.)		Direction of extraction 15.5 N MIN (note2)	X	—
ENVIRONMENTAL CHARACTERISTICS					
Rapid change of temperature	Temperature-55→+15T _O +35→+125→+15T _O +35°C Time 30→ 2 to 3 → 30 → 2 to 3 min Under 1000 cycles.		① Contact resistance: 70 mΩ MAX ② Insulation resistance: 50 MΩ MIN. ③ No damage, crack and looseness of parts.	X	—
Damp heat (Steady state)	Exposed at 60±2 °C, Relative humidity 90 to 95 %, 1000 h.			X	—
Damp heat,cyclic	Exposed at -10 to +65 °C, Relative humidity 90 to 96 %, 10 cycles, TOTAL 240 h.		① Contact resistance: 70 mΩ MAX ② Insulation resistance: 1 MΩ MIN. (At high humidity) ③ Insulation resistance: 50 MΩ MIN. (At dry) ④ No damage, crack and looseness of parts	X	—
Dry heat	Exposed at 125±2°C, 1000 h.		① Contact resistance: 70 mΩ MAX	X	—
Cold	Exposed at -55±3°C, 96 h.		② No damage, crack and looseness of parts	X	—
Sulphur dioxide [JIS C 60068-2-42]	Exposed at 40±2 °C, Relative humidity 80±5% 25±5 ppm for 96 h.		① Contact resistance: 70 mΩ MAX	X	—
Solderability	Soldered at solder temperature, 245±0.3°C for immersion duration,3±0.3 sec.		A new uniform coating of solder shall cover a minimum of 95 % of the surface being immersed.	X	—
Resistance to soldering heat	1) Reflow soldering : Peak TMP. 250 °C MAX . Reflow TMP. over 220 °C 60 to 90 sec. Number of reflow : 2 times 2) Soldering irons : TMP. 400±10 °C for 5±1 sec .		No deformation of case of excessive looseness of the terminals. (note 3)	X	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	0				
REMARK			APPROVED	HS. HIRAHARA	20230804
			CHECKED	HS. HIRAHARA	20230804
			DESIGNED	YT. SASAKI	20230804
Unless otherwise specified, refer to IEC 60512.			DRAWN	YT. SASAKI	20230804
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-379025-00-00
	SPECIFICATION SHEET		PART NO.	FH69-10S-0. 5SH	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL580-5003-0-00	 1/2

(note 1)

The heat resistant temperature when using FFC is 105°C.

When the heat resistant temperature of FPC/FFC is less than 125°C/105°C, the heat resistant temperature of FPC/FFC is applied.



(note 2)

Stabilize the FPC/FFC to PCB or something fixed, if pull-up or pull-down force is expected to be applied to the FPC/FFC.

There's a case with FPC/FFC retention force doesn't fulfill the value, because FPC/FFC specification affects the result of FPC/FFC retention force.

(note 3)

Blisters which may be generated on the housing do not affect product performance.

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