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APPLICABLE STANDARD				
RATING	Operating temperature range	-55 °C to 125 °C ***(note 1)***	Storage temperature range	−10℃ TO 50℃(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.	×	×
Marking	Confirmed visually.		×	×
ELECTRICAL CHARACTERISTICS				
Voltage proof	150 V AC for 1 min.	No flashover or breakdown.	×	—
Insulation resistance	100 V DC.	500 MΩ MIN.	×	—
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)	×	—
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 ③ No damage, crack and looseness of parts.	×	—
Shock	981 m/s^2 , duration of pulse 6 ms at 3 times in 3 both axial directions.		×	—
Mechanical operation	10 times insertions and extractions.	① Contact resistance: 70 mΩ MAX ② No damage, crack and looseness of parts.	×	—
FPC/FFC retention force	Measured by applicable FPC/FFC. (Thickness of FPC/FFC shall be t=0.30mm at initial condition.)	Direction of extraction (n : Number of contacts) 13+0.25×n N MIN (***note2***)	×	—
ENVIRONMENTAL CHARACTERISTICS				
Rapid change of temperature	Temperature-55→+15TO+35→+125→+15TO+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.	×	—
Damp heat (Steady state)	Exposed at 60±2 °C, Relative humidity 90 to 95 %, 1000 h.		×	—
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	×	—
Dry heat	Exposed at 125±2℃, 1000 h.	① Contact resistance: 70 mΩ MAX ② No damage, crack and looseness of parts	×	—
Cold	Exposed at -55±3℃, 96 h.		×	—
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	×	—
Solderability	Soldered at solder temperature, 245±0.3℃ for immersion duration,3±0.3 sec.	A new uniform coating of solder shall cover a minimum of 95 % of the surface being immersed.	×	—
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***)	×	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△1					

REMARK

Unless otherwise specified, refer to IEC 60512.

APPROVED	HS. HIRAHARA	20210826
CHECKED	HS. HIRAHARA	20210826
DESIGNED	SH. YAMAGUCHI	20210825
DRAWN	HN. UCHIUMI	20210825

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC-392112-00-00

HRS	SPECIFICATION SHEET	PART NO.	FH69-**S-0.5SH	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL580	△1 1/2

(*note 1*)

The heat resistant temperature when using FFC is 105℃.

When the heat resistant temperature of FPC/FFC is less than 125℃/105℃, 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 exepected to be applied to the FPC/FFC.

There's a case witch 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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