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 25.5 N MIN (***note2***) ⚠1	×	—
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	1	DIS-F-00018728	YT. SASAKI	HS. HIRAHARA	20230801

REMARK

Unless otherwise specified, refer to IEC 60512.

APPROVED	HS. HIRAHARA	20230719
CHECKED	HS. HIRAHARA	20230719
DESIGNED	YT. SASAKI	20230719
DRAWN	YT. SASAKI	20230719

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

DRAWING NO. ELC-399242-00-00

HRS	SPECIFICATION SHEET	PART NO.	FH69-50S-0.5SH	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL580	⚠1 1/2

FORM HD0011-2-1

(*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.