



APPLICABLE STANDARD						
RATING	Operating temperature range	-40 °C to 125 °C	Storage temperature range	-10 °C to 50 °C (Packed condition)		
	Voltage	50 V AC / DC	Operating or storage humidity range	Relative humidity 90% MAX (Not dewed)		
	Current	0.5 A	Applicable cable (FPC/FFC)	t = 0.3 ± 0.05 mm, Gold plating Heat resistance : 125 °C		
SPECIFICATIONS						
ITEM		TEST METHOD		REQUIREMENTS	QT	AT
CONSTRUCTION						
General examination		Visually and by measuring instrument.		According to drawing.	×	×
Marking		Confirmed visually.			×	×
ELECTRICAL CHARACTERISTICS						
Contact resistance		1 mA (DC or 1000 Hz).		50 mΩ MAX. Including FPC/FFC bulk resistance (L = 8 mm)	×	×
Insulation resistance		100 V DC.		500 MΩ MIN.	×	×
Voltage proof		150 V AC for 1 min.		No flashover or breakdown.	×	×
MECHANICAL CHARACTERISTICS						
Mechanical operation		20 times insertions and extractions.		① Contact resistance : 50 mΩ MAX. ② No damage, crack and looseness of parts. ③ No damage, crack and looseness of parts.	×	—
Vibration		Frequency 10 to 55 Hz, half amplitude 0.75 mm, for 10 cycles in 3 axial directions.			×	—
Shock		981 m/s <sup>2</sup> , duration of pulse 6 ms at 3 times in 3 both axial directions.			×	—
FPC/FFC retention force		Measured by applicable FPC/FFC. (Connector, FPC/FFC at initial condition. Thickness of FPC/FFC shall be t = 0.30 mm)		Direction of insertion : 0.3 × n N MIN. (n : Number of contacts) (note 1)	×	—
ENVIRONMENTAL CHARACTERISTICS						
Rapid change of temperature		Temperature -55→+15 to +35→+125→+15 to +35 °C Time 30→ 2 to 3 → 30 → 2 to 3 min. Under 1000 cycles.		① Contact resistance : 50 mΩ MAX. ② Insulation resistance : 50 MΩ MIN. ③ No damage, crack and looseness of parts.	×	—
High temperature and high humidity		Exposed at 85 ± 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 : 50 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 °C, 1000 h.			×	—
Cold		Exposed at -55 ± 3 °C, 1000 h.		Contact resistance : 50 mΩ MAX.	×	—
Corrosion salt mist		Exposed at 35 ± 2 °C, 5 % salt water spray for 96 h.			×	—
Sulphur dioxide [JIS C 60068-2-42]		Exposed at 40 ± 2 °C, Relative humidity 80 ± 5 %, 25 ± 5 ppm for 96 h.			×	—
Hydrogen sulphide [JIS C 60068-2-43]		Exposed at 40 ± 2 °C, Relative humidity 80 ± 5 %, 10 to 15 ppm for 96 h.			×	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE	
△	1	DIS-F-00001999	SG. MASAKI	HS. SAKAMOTO	17.01.12	
REMARK			APPROVED	NF. MIYAZAKI	16.12.16	
			CHECKED	HS. SAKAMOTO	16.12.16	
			DESIGNED	SG. MASAKI	16.12.16	
			DRAWN	SG. MASAKI	16.12.16	
Unless otherwise specified, refer to IEC 60512.						
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-371661-00-00	
HRS	SPECIFICATION SHEET		PART NO.	FH65-**S-0.5SH		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL580	△	1/2

SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
Resistance to soldering heat	1) Reflow soldering (To be 2 times MAX.) Peak TMP. 250 °C MAX. Reflow TMP. over 230 °C within 60 sec. Pre-heating. 150 to 200 °C 90 to 120 sec. 2) Soldering irons : 400 ± 10 °C, for 5 ± 1 sec.	No deformation of case of excessive looseness of the terminals.	×	—	
Solderability	Soldered at solder temperature, 245 ± 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.	×	—	
<p>(note 1)</p> <p>This product has flip-lock construction.</p> <p>Fasten FPC/FFC on PCB or something fixed if force in vertical direction shall be predicted.</p>					
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