

APPLICABLE STANDARD							
RATING	Operating temperature range	-55°C to 85°C	Storage temperature range	-10°C TO 50°C (packed condition)			
	Voltage	30V AC/DC	Operating or storage humidity range	Relative humidity 90%MAX(not dewed)			
	Current	0.20A	Applicable cable	t=0.2±0.02mm, gold plating			
SPECIFICATIONS							
ITEM		TEST METHOD		REQUIREMENTS			
CONSTRUCTION							
General examination		Visually and by measuring instrument.		According to drawing. (note 1,2)	×		
Marking		Confirmed visually.			×		
ELECTRICAL CHARACTERISTICS							
Voltage proof		90V AC for 1 min.		No flashover or breakdown.	×		
Insulation resistance		100V DC.		50MΩ MIN.	×		
Contact resistance		20mV AC MAX, 1mA.		300mΩ 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 1μs. ② Contact resistance: 300mΩ MAX. ③ No damage, crack and loose 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: 300mΩ MAX. ② No damage, crack and loose parts.	×		
FPC retention force		Measured by applicable FPC. (thickness of FPC shall be t=0.20mm at initial ondition)		Direction of insertion: (0.14 × n)+1N MIN(note 3) (n: Number of contacts)	×		
ENVIRONMENTAL CHARACTERISTICS							
Corrosion salt mist		Exposed at 35±2°C, 5% salt water spray for 96h.		① Contact resistance: 300mΩ MAX. ② No damage, crack and loose parts. ③ No evidence of corrosion which affects connector's operation.	×		
Rapid change of temperature		Temperature-55 → +15TO+35 → +85 → +15TO+35°C Time 30 → 2 TO 3 → 30 → 2 TO 3 min Under 5 cycles.		① Contact resistance: 300mΩ MAX. ② Insulation resistance: 50MΩ MIN. ③ No damage, crack and loose parts.	×		
Damp heat (steady state)		Exposed at 40±2°C, relative humidity 90 to 95%, 96h.			×		
Damp heat,cyclic		Exposed at -10 to +65°C, relative humidity 90 to 96%, 10 cycles, total 240h.		① Contact resistance: 300mΩ MAX. ② Insulation resistance: 1MΩ MIN. (at high humidity) ③ Insulation resistance: 50MΩ MIN. (at dry) ④ No damage, crack and loose parts.	×		
Dry heat		Exposed at 85±2°C, 96h.		① Contact resistance: 300mΩ MAX. ② No damage, crack and loose parts.	×		
Cold		Exposed at -55±3°C, 96h.			×		
Sulphur dioxide [JIS C 60068-2-42]		Exposed at 40±2°C, relative humidity 80±5%, 25±5ppm for 96h.		① Contact resistance: 300mΩ MAX. ② No damage, crack and loose parts. ③ No evidence of corrosion which affects connector's operation.	×		
Hydrogen sulphide [JIS C 60068-2-43]		Exposed at 40±2°C, relative humidity 80±5%, 10 to 15ppm for 96h.			×		
COUNT		DESCRIPTION OF REVISIONS		DESIGNED	CHECKED		
△							
REMARK				APPROVED	NF. MIYAZAKI		
				CHECKED	YH. MICHIDA		
				DESIGNED	SI. MIZUSAWA		
				DRAWN	OTNIEL RINALDO		
Unless otherwise specified, refer to IEC 60512.							
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-370587-00-00		
HRS	SPECIFICATION SHEET		PART NO.	FH58-**S-0. 2SHW			
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL580	△ 1/2		

SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
Solderability	Soldered at solder temperature $245 \pm 3^{\circ}\text{C}$, 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 230°C within 60 sec. 2) Soldering irons: tmp. $350 \pm 10^{\circ}\text{C}$ for 5 ± 1 sec.	No case-deformation and loose contacts. (note 4)	X	—	
<p>(note1) This connector is back flip lock type, and top/bottom both contact points are available.</p> <p>(note2) Do not close the actuator before inserting FPC even after the connector is mounted onto a PCB. Closing the actuator without FPC could make the contact gap smaller, which increases the FPC insertion force.</p> <p>(note3) If pull-up or pull-down force is expected to be applied to the FPC, stabilize the FPC into PCB or other fixed components.</p> <p>(note4) Blisters which may be generated on the housing do not affect product performance.</p>					
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