

In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

APPLICABLE STANDARD		TEST METHOD		REQUIREMENTS		QT	AT
Rating	Operating Temperature Range	-55 °C to 85 °C ⁽¹⁾	Storage Temperature Range	-10 °C to 60 °C ⁽²⁾			
	Voltage	50 V AC	Storage Humidity Range	Relative humidity 85% max (Not dewed)			
	Current	0.5 A	Operating Humidity Range				
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
ELECTRIC CHARACTERISTICS							
Contact Resistance	100 mA(DC or 1000Hz)			70 mΩ MAX.			X
Insulation Resistance	100 V DC.			100 MΩ MIN.			X
Voltage Proof	150 V AC for 1 min.			No flashover or breakdown.			X
MECHANICAL CHARACTERISTICS							
Insertion And Withdrawal Forces	Measured by applicable connector.			Insertion Force: 14 N MAX. Withdrawal Force: 1.8 N MIN.			X
Mechanical Operation	50 times insertions and extractions.			① Contact Resistance: Variation from initial value 20 mΩ or less. ② No damage, crack and looseness of parts.			X
Vibration	Frequency 10 to 55 to 10Hz, approx 5min Single Amplitude : 0.75 mm, 10 cycles for 3 axial directions.			① No electrical discontinuity of 1 μs. ② No damage, crack and looseness of parts.			X
Shock	490 m/s ² , duration of pulse 11 ms at 3 times for 3 both axial directions.						X
ENVIRONMENTAL CHARACTERISTICS							
Damp Heat (Steady state)	Exposed at 40±2 °C, 90 ~ 95 %, 96 h.			① Contact Resistance: Variation from initial value 20 mΩ or less. ② Insulation Resistance : 100 MΩ MIN. ③ No damage, crack and looseness of parts.			X
Rapid Change of Temperature	Temperature -55 → +85 °C Time 30 → 30 min. Under 5 cycles. (Relocation time to chamber:within 2~3 MIN)						X
Cold	Exposed at -55°C, 96 h			① Contact Resistance: Variation from initial value 20 mΩ or less. ② No damage, crack and looseness of parts.			X
Dry Heat	Exposed at 85°C, 96 h						X
Sulfur Dioxide	Exposed at 25±2°C, 75±5%RH, 25 PPM for 96 h. (Test standard : JIS C 60068)			① No defect such as corrosion which impairs the function of connector. ② Contact Resistance: variation from initial value 20 mΩ or less. No deformation of case of excessive looseness of the terminal.			X
Resistance to Soldering Heat	1)Reflow Soldering : Peak TMP : 260°C MAX Reflow TMP : 220°C MIN for 60sec 2) Soldering Irons : 360°C MAX. for 5 sec.						X
Solderability	Soldered at solder temperature 240±3°C for immersion duration, 3 sec.			A new uniform coating of solder shall cover a minimum of 95 % of the surface being immersed.			X
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE		
Δ							
REMARKS ⁽¹⁾ Include temperature rise caused by current-carrying. ⁽²⁾ "STORAGE" means a long-term storage state for the unpacked part before assembly to PCB.							
Unless otherwise specified, refer to JIS-C-5402.							
Note	QT:Qualification Test	AT:Assurance Test	X:Applicable Test	DRAWING NO.	ELC4-350411-00		
HRS		SPECIFICATION SHEET		PART NO.	FX20-20S-0.5SH		
		HIROSE ELECTRIC CO., LTD.		CODE NO.	CL570-1611-1-00		
				APPROVED	HS. OKAWA		
				CHECKED	KN. SHIBUYA		
		DESIGNED	TS. 00NO				
		DRAWN	TS. 00NO				
			14.05.29				