

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 <sup>(1)</sup>	Storage Temperature Range	-10 °C to 60 °C <sup>(2)</sup>				
	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	
<b>CONSTRUCTION</b>								
General Examination	Visually and by measuring instrument.			According to drawing.			X X X	
Marking	Confirmed visually.						X X X	
<b>ELECTRIC CHARACTERISTICS</b>								
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	X	
<b>MECHANICAL CHARACTERISTICS</b>								
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.		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 <sup>2</sup> , duration of pulse 11 ms at 3 times for 3 both axial directions.					X	-	
<b>ENVIRONMENTAL CHARACTERISTICS</b>								
Damp Heat (Steady state)	Exposed at 40±2 °C, 90 ~ 95 %, 96 h.			① Contact Resistance: Variation from initial value 20 mΩ or less.		X	-	
Rapid Change of Temperature	Temperature -55 → +85 °C Time 30 → 30 min. Under 5 cycles. (Relocation time to chamber:within 2~3 MIN)			② Insulation Resistance : 100 MΩ MIN. ③ No damage, crack and looseness of parts.		X	-	
Cold	Exposed at -55°C, 96 h			① Contact Resistance: Variation from initial value 20 mΩ or less.		X	-	
Dry Heat	Exposed at 85°C, 96 h			② No damage, crack and looseness of parts.		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.		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.			No deformation of case of excessive looseness of the terminal.		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				
△								
<b>REMARKS</b> <sup>(1)</sup> Include temperature rise caused by current-carrying. <sup>(2)</sup> "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.	ELC4-349946-00					
<b>HRS</b>		SPECIFICATION SHEET		PART NO.	FX20-20P-0.5SV20			
		HIROSE ELECTRIC CO., LTD.		CODE NO.	CL570-1015-5-00			
				APPROVED	HS. OKAWA	14.05.29		
				CHECKED	KN. SHIBUYA	14.05.29		
		DESIGNED	TS. 00NO	14.05.29				
		DRAWN	TS. 00NO	14.05.29				