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

APPLICABLE STANDARD				
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.	×	×
Marking	Confirmed visually.		×	×
ELECTRIC CHARACTERISTICS				
Contact Resistance	100 mA(DC or 1000Hz)	70 mΩ MAX .	×	—
Insulation Resistance	100 V DC.	100 MΩ MIN.	×	—
Voltage Proof	150 V AC for 1 min.	No flashover or breakdown.	×	×
MECHANICAL CHARACTERISTICS				
Insertion And Withdrawal Forces	Measured by applicable connector.	Insertion Force: 14 N MAX. Withdrawal Force: 1.8 N MIN.	×	—
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.	×	—
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.	×	—
Shock	490 m/s^2 , duration of pulse 11 ms at 3 times for 3 both axial directions.		×	—
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.	×	—
Rapid Change of Temperature	Temperature -55 → +85 °C Time 30 → 30 min. Under 5 cycles. (Relocation time to chamber:within 2～3 MIN)		×	—
Cold	Exposed at -55℃, 96 h	① Contact Resistance: Variation from initial value 20 mΩ or less. ② No damage, crack and looseness of parts.	×	—
Dry Heat	Exposed at 85℃, 96 h		×	—
Sulfur Dioxide	Exposed at 25±2℃, 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.	×	—
Resistance to Soldering Heat	1)Reflow Soldering : Peak TMP : 260℃MAX Reflow TMP: 220℃MIN for 60sec 2) Soldering Irons : 360℃ MAX. for 5 sec.	No deformation of case of excessive looseness of the terminal.	×	—
Solderability	Soldered at solder temperature 240±3℃ for immersion duration, 3 sec.	A new uniform coating of solder shall cover a minimum of 95 % of the surface being immersed.	×	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△0					

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.

APPROVED	HS. OKAWA	14. 05. 29
CHECKED	KN. SHIBUYA	14. 05. 29
DESIGNED	TS. OONO	14. 05. 29
DRAWN	TS. OONO	14. 05. 29

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

DRAWING NO. ELC4-350411-00

HRS

SPECIFICATION SHEET

HIROSE ELECTRIC CO., LTD.

PART NO. FX20-20S-0.5SH

CODE NO. CL570-1611-1-00 △0 1/1

FORM HD0011-2-1