



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	125 V AC	OPERATING HUMIDITY RANGE	40 % TO 80 %			
	CURRENT	0.5 A	STORAGE HUMIDITY RANGE	40 % TO 70 % ⁽²⁾			
SPECIFICATIONS							
ITEM	TEST METHOD		REQUIREMENTS		QT	AT	
GENERAL EXAMINATION		VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.		X	X	X
MARKING		CONFIRMED VISUALLY.			X	X	X
ELECTRIC CHARACTERISTICS							
CONTACT RESISTANCE	100 mA (DC OR 1000 Hz).		45 mΩ MAX.		X		-
CONTACT RESISTANCE MILLIVOLT LEVEL METHOD	20 mV MAX, 1 mA(DC OR 1000Hz)		55 mΩ MAX.		X		-
INSULATION RESISTANCE	250 V DC		100 MΩ MIN.		X		-
VOLTAGE PROOF	300 V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.		X		-
MECHANICAL CHARACTERISTICS							
INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.		INSERTION FORCE: 105.8 N MAX. WITHDRAWAL FORCE: 11.8 N MIN.		X		-
MECHANICAL OPERATION	500 TIMES INSERTIONS AND EXTRactions.		① CONTACT RESISTANCE: 55 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		X		-
VIBRATION	FREQUENCY 10 TO 55 Hz. AMPLITUDE : 1.52 mm, AT 2h FOR 3 DIRECTIONS.		① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		X		-
SHOCK	490 ms ² , DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.				X		-
ENVIRONMENTAL CHARACTERISTICS							
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.		① CONTACT RESISTANCE: 55 mΩ MAX. ② INSULATION RESISTANCE: 100 MΩ MIN.		X		-
RAPID CHANGE OF TEMPERATURE	TEMPERATURE: -55 → +15 ~ +35 → +85 → +15 ~ +35 °C TIME 30 → 10 ~ 15 → 30 → 10 ~ 15 min. UNDER 5 CYCLES.		③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		X		-
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.		① CONTACT RESISTANCE: 55 mΩ MAX. ② NO HEAVY CORROSION.		X		-
HYDROGEN SULPHIDE	EXPOSED IN 3 ppm FOR 96 h. (TEST STANDARD: JEIDA 38)				X		-
RESISTANCE TO SOLDERING HEAT	1) SOLDER BATH: SOLDER TEMPERATURE, 260±5°C FOR IMMERSION DURATION, 10±1s. 2) SOLDERING IRONS : 360°C FOR 5s.		NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.		X		-
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 240±3°C, FOR IMMERSION DURATION, 2 s.		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			
△							
REMARK ⁽¹⁾ TEMPERATURE RISE INCLUDED WHEN ENERGIZED. ⁽²⁾ THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED.							
Unless otherwise specified, refer to MIL-STD-1344.							
Note QT: Qualification Test AT: Assurance Test X: Applicable Test		DRAWING NO.		ELC4-082545-21			
		SPECIFICATION SHEET		PART NO.		FX20-120S-1. 27DSAL (71)	
		HIROSE ELECTRIC CO., LTD.		CODE NO.		GL572-2459-7-71	
						 1/1	