

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	INSIDE 2 ROWS OPERATING HUMIDITY RANGE 250V AC	40 % TO 80 %			
	CURRENT	0.5 A	INSIDE 2 ROWS STORAGE HUMIDITY RANGE 1A	40 % TO 70 % ⁽²⁾			
SPECIFICATIONS							
ITEM	TEST METHOD			REQUIREMENTS			
CONSTRUCTION							
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.			ACCORDING TO DRAWING.			
MARKING	CONFIRMED VISUALLY.						
ELECTRIC CHARACTERISTICS							
CONTACT RESISTANCE	100 mA (DC OR 1000 Hz).	60 mΩ MAX.					
CONTACT RESISTANCE MILLIVOLT LEVEL METHOD	20 mV MAX, 1 mA(DC OR 1000Hz)	60 mΩ MAX.					
INSULATION RESISTANCE	250 V DC.	1000 MΩ MIN.					
VOLTAGE PROOF	300 V AC FOR 1 min. (INSIDE 2 ROW:600 V AC)	NO FLASHOVER OR BREAKDOWN.					
MECHANICAL CHARACTERISTICS							
INSERTION AND WITHDRAWAL FORCE	MEASURED BY APPLICABLE CONNECTOR.			INSERTION FORCE: 112.8 N MAX.			
MECHANICAL OPERATION	500 TIMES INSERTIONS AND EXTRactions.			WITHDRAWAL FORCE: 14.1 N MIN.			
VIBRATION	FREQUENCY 10 TO 55 Hz. AMPLITUDE : 1.5 mm, AT 2 h FOR 3 DIRECTION.			① CONTACT RESISTANCE: 70 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.			
SHOCK	490 ms ² , DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.			① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.			
ENVIRONMENTAL CHARACTERISTICS							
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.	① CONTACT RESISTANCE: 70 mΩ MAX. ② INSULATION RESISTANCE: 1000 MΩ MIN.					
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.					
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.	① CONTACT RESISTANCE: 70 mΩ MAX. ② NO HEAVY CORROSION.					
SULPHUR DIOXIDE	EXPOSED IN 10 PPM FOR 96 h. (TEST STANDARD: JEIDA-39)						
RESISTANCE TO SOLDERING HEAT	1) SOLDER BATH: SOLDER TEMPERATURE, 260±5°C. FOR IMMERSION, DURATION, 10±1s. 2) SOLDERING IRONS : 360°C. FOR 5 s.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.					
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE 240±3°C. FOR IMMERSION DURATION, 2s.	A NEW UNIFORM COATING OF SOLDER SHALL OVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.					
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.		ELC4-081605-21			
HRS SPECIFICATION SHEET HIROSE ELECTRIC CO., LTD.		PART NO.		FX1-144S-1. 27DSL (71)			
		CODE NO.		CL571-0053-5-71			
				APPROVED HS. OKAMA 09.03.16 CHECKED HT. YAMAGUCHI 09.03.16 DESIGNED SY. KAMIGA 09.03.16 DRAWN HK. SUWADORI 09.03.16			
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