

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	OPERATING HUMIDITY RANGE	RELATIVE HUMIDITY 95 % RH MAX. ⁽³⁾			
	CURRENT	0.3 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).		60 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
MECHANICAL CHARACTERISTICS							
INSERTION AND WITHDRAWAL FORCE	MEASURED BY APPLICABLE CONNECTOR.		INSERTION FORCE: 100.8 N MAX. WITHDRAWAL FORCE: 4.2 N MIN.				X
MECHANICAL OPERATION	50 TIMES INSERTIONS AND EXTRACTIONS.		① CONTACT RESISTANCE: 70 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.				X
VIBRATION	FREQUENCY 10 TO 55 Hz. SINGLE AMPLITUDE : 0.75 mm, AT 10 CYCLES FOR 3 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 DIRECTIONS.		② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.				X
ENVIRONMENTAL CHARACTERISTICS							
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.		① CONTACT RESISTANCE: 70 mΩ MAX. ② INSULATION RESISTANCE: 100 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.				X X
RAPID CHANGE OF TEMPERATURE	TEMPERATURE: -55 → +15 ~ +35 → +85 → +15 ~ +35 °C TIME 30 → 2 ~ 3 → 30 → 2 ~ 3 min. UNDER 5 CYCLES.		① CONTACT RESISTANCE: 70 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.				X
DRY HEAT	EXPOSED AT 85 °C, 96h.		① CONTACT RESISTANCE: 70 mΩ MAX.				X
COLD	EXPOSED AT -55 °C, 96h.		② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.				X
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.		① CONTACT RESISTANCE: 70 mΩ MAX. ② NO HEAVY CORROSION.				X
SULPHUR DIOXIDE	EXPOSED IN 10 PPM FOR 96 h. (TEST STANDARD: JIS C 0090)		② NO HEAVY CORROSION.				X
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING: 250 °C MAX, : 220 °C MIN, FOR 60 s 2) SOLDERING IRONS : 360 °C, FOR 5 s		NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.				X
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 240 °C, FOR IMMERSION DURATION, 3 s.		A NEW UNIFORM COATING OF SOLDER SHALL OVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSERD.				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. ⁽³⁾ NO DEW CONDENSATION IS PERMITTED.							
Unless otherwise specified, refer to JIS C 5402.							
Note QT: Qualification Test AT: Assurance Test X: Applicable Test		DRAWING NO.		ELC4-151971-21			
HRS SPECIFICATION SHEET HIROSE ELECTRIC CO., LTD.		PART NO.		FX10A-168P-SV1 (91)			
		CODE NO.		CL570-0144-2-91		△	1/1
		APPROVED		HS. OKAWA		10.08.16	
		CHECKED		HT. YAMAGUCHI		10.08.16	
		DESIGNED		SY. KAMIIGA		10.08.07	
		DRAWN		HK. SUWADORI		10.08.06	