

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		OPERATING HUMIDITY RANGE	RELATIVE HUMIDITY 95 % RH MAX. <sup>(3)</sup>			
	CURRENT	0.3 A		STORAGE HUMIDITY RANGE	40 % TO 70 % <sup>(2)</sup>			
SPECIFICATIONS								
ITEM	TEST METHOD			REQUIREMENTS			QT	AT
GENERAL EXAMINATION		VISUALLY AND BY MEASURING INSTRUMENT.		ACCORDING TO DRAWING.			x	x
MARKING		CONFIRMED VISUALLY.					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: 72.0 N MAX. WITHDRAWAL FORCE: 3.0 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 <sup>2</sup> , 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: 70 mΩ MAX. ② INSULATION RESISTANCE: 100 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		x		
RAPID CHANGE OF TEMPERATURE		TEMPERATURE: -55 → +15 → +35 → +85 → +15 → +35 °C TIME 30 → 2 ~ 3 → 30 → 2 ~ 3 min. UNDER 5 CYCLES.				x		
DRY HEAT		EXPOSED AT 85 °C, 96h.		① CONTACT RESISTANCE: 70 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		x		
COLD		EXPOSED AT -55 °C, 96h.				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)				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 <sup>(1)</sup> TEMPERATURE RISE INCLUDED WHEN ENERGIZED. <sup>(2)</sup> THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. <sup>(3)</sup> 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.		ELC4-151973-21				
<b>HRS</b>		SPECIFICATION SHEET		PART NO.		FX10B-120P-SV1 (91)		
		HIROSE ELECTRIC CO., LTD.		CODE NO.		CL570-0152-0-91		
						△ 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				