


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
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:	100.8 N MAX.		x	
MECHANICAL OPERATION	50 TIMES INSERTIONS AND EXTRACTIONS.			WITHDRAWAL FORCE:	4.2 N MIN.			
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE : 0.75 mm, AT 10 CYCLES FOR 3 DIRECTIONS.			① CONTACT RESISTANCE: 70 mΩ MAX. 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.			① NO ELECTRICAL DISCONTINUITY OF 1 μs. 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		
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 COVER 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.		APPROVED	HS. OKAWA		10.08.16		
			CHECKED	HT. YAMAGUCHI		10.08.16		
			DESIGNED	SY. KAMIIGA		10.08.07		
			DRAWN	HK. SUWADORI		10.08.06		
Note		QT: Qualification Test	AT: Assurance Test	X: Applicable Test				
HRS HIROSE ELECTRIC CO., LTD.		SPECIFICATION SHEET		DRAWING NO.		ELC4-151975-21		
		PART NO.		FX10B-168P-SV1 (91)				
		CODE NO.		CL570-0154-6-91		 1/1		