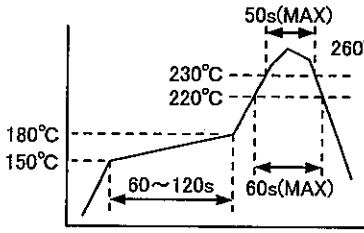
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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE		COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
△						△					
△						△					

APPLICABLE STANDARD

RATING	OPERATING TEMPERATURE RANGE	-40 °C TO 85 °C (1)	STORAGE TEMPERATURE RANGE	-10 °C TO 60 °C (2)
	VOLTAGE	100 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
CONSTRUCTION				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	×	×
MARKING	CONFIRMED VISUALLY.		×	×
ELECTRIC CHARACTERISTICS				
CONTACT RESISTANCE	20 mV MAX. 1 mA (DC OR 1000Hz)	60 mΩ MAX. (3)	×	
INSULATION RESISTANCE	100 V DC	500 MΩ MIN	×	
VOLTAGE PROOF	300 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	×	
MECHANICAL CHARACTERISTICS				
INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION FORCE: 18.6 N MAX. WITHDRAWAL FORCE: 1.55 N MIN.	×	
MECHANICAL OPERATION	50 TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: 80 mΩ MAX.(3) ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS	×	
VIBRATION	FREQUENCY 10 TO 55 Hz, AMPLITUDE : 1.5 mm, AT 2 h FOR 3 DIRECTION.	① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	
SHOCK	490 m/s², DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.		×	
ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.	① CONTACT RESISTANCE: 80 mΩ MAX.(3) ② INSULATION RESISTANCE: 500 MΩ MIN.	×	
RAPID CHANGE OF TEMPERATURE	TEMPERATURE-55→+15~+35→+85→+15~+35°C TIME 30 → 2~3 → 30 → 2~3 min UNDER 5 CYCLES.	③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	
CORROSION SALT MIST	EXPOSED IN 5% SALT WATER SPRAY FOR 48 h.	NO HEAVY CORROSION.	×	
SULFUR DIOXIDE	EXPOSED IN 10 PPM FOR 96 h. (TEST STANDARD: JIS-C-0090)		×	
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING : REFLOW 2 TIMES UNDER THE TEMPERATURE PROFILE SHOWN BELOW.  	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	×	
	2) SOLDERING IRONS : 360 °C MAX. FOR 5 sec.		×	
SOLDERABILITY	SOLDER TEMPERATURE : 240 ± 3°C FOR IMMERSION DURATION : 3 sec.	A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	×	

REMARKS (1) INCLUDE TEMPERATURE RISE OF CURRENT CARRYING.
(2) "STORAGE" MEANS LONG-TERM STORAGE STATE BEFORE ASSEMBLY TO PCB.
(3) INCLUDE CONDUCTOR RESISTANCE OF CABLE IN CASE THE MATED CONNECTOR IS CABLE TYPE. (L=12mm)
Unless otherwise specified, refer to JIS C 5402.

DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
K. Shibuya '05.02.10	K. Shibuya '05.02.10	H. Yamaguchi '05.02.14	H. Okawa '05.02.14	-

Note QT:Qualification Test AT:Assurance Test ×:Applicable Test

HRS HIROSE ELECTRIC CO., LTD.	SPECIFICATION SHEET	PART NO. FX15-31S-0.5SV	
CODE NO.(OLD) CL	DRAWING NO. ELC4 – 155329	CODE NO. CL 575-2201-7	1/1

FORM No.231-1

TD
PCK