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

APPLICABLE STANDARD						
RATING	OPERATING TEMPERATURE RANGE	-55 °C TO 85 °C ⁽¹⁾⁽²⁾	STORAGE TEMPERATURE RANGE	-10 °C TO 60 °C ⁽³⁾		
	OPERATING HUMIDITY RANGE	RH 85 % MAX ⁽²⁾⁽⁴⁾	STORAGE HUMIDITY RANGE	RH 70 % MAX ⁽³⁾⁽⁴⁾		
	VOLTAGE	60 V AC	CURRENT	0.5 A		
	SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT		
CONSTRUCTION						
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	x	x		
MARKING	CONFIRMED VISUALLY.		x	x		
ELECTRIC CHARACTERISTICS						
CONTACT RESISTANCE	20 mV MAX, 1 mA(DC OR 1000Hz)	80 mΩ MAX. ⁽⁵⁾	x			
INSULATION RESISTANCE	100 V DC.	500 MΩ MIN.	x			
VOLTAGE PROOF	200 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	x			
MECHANICAL CHARACTERISTICS						
INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION FORCE: 20.5 N MAX. WITHDRAWAL FORCE: 2.05 N MIN.	x			
MECHANICAL OPERATION	50 TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: NO VARIATION OF 20 mΩ OR MORE FROM INITIAL VALUE. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x			
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGL AMPLITUDE : 0.75 mm, FOR 2 h IN 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 FOR 3 TIMES IN 3 DIRECTIONS.		x			
ENVIRONMENTAL CHARACTERISTICS						
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.	① CONTACT RESISTANCE: NO VARIATION OF 20 mΩ OR MORE FROM INITIAL VALUE. ② INSULATION RESISTANCE: 500 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x			
DRY HEAT	EXPOSED AT 85±2 °C, 96 h		x			
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → +5~+35 → +85 → +5~+35 °C TIME 30 → 5 MAX → 30 → 5 MAX min. UNDER 5 CYCLES.	① CONTACT RESISTANCE: NO VARIATION OF 20 mΩ OR MORE FROM INITIAL VALUE. ② NO DERECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR.	x			
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.		x			
SULFUR DIOXIDE	EXPOSED IN 25 PPM FOR 96 h. (TEST STANDARD: JIS C 60068)		x			
AMMONIA RESISTANCE	HYDROGEN-ION CONCENTRATION(pH)=10 TEST TIME:72±4h TEMPERATURE:15~35°C.	CONTACT RESISTANCE: NO VARIATION OF 20mΩ OR MORE FROM INITIAL VALUE.	x			
RESISTANCE TO SOLDERING HEAT	1)REFLOW SOLDERING : REFLOW 2 TIMES UNDER THE TEMPERATURE PROFILE SHOWN BELOW. 2) SOLDERING IRONS : 360°C MAX. FOR 5 sec.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.	x			
SOLDERABILITY	SOLDERED AT 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.	x			
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE	
REMARKS				APPROVED	HS. OKAWA	10. 03. 09
(1) INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING.				CHECKED	HT. YAMAGUCHI	10. 03. 09
(2) OPERATING TEMPERATURE SHOULD BE -55 TO 40°C WHEN HUMIDITY EXCEEDS 80% RH.				DESIGNED	TP. MATSUMOTO	10. 03. 09
(3) "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB.				DRAWN	TP. MATSUMOTO	10. 03. 09
(4) THERE MUST NOT BE DEWFALL.						
(5) DON'T INCLUDE THE CONDUCTOR RESISTANCE OF THE CABLE OF THE COMBINATION CONNECTOR.						
Unless otherwise specified, refer to JIS-C-5402.						
Note	QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.	ELC4-330389-00		
HRS	SPECIFICATION SHEET		PART NO.	FX16M2-41S-0.5SV		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL575-3002-6-00		1/1