


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		STORAGE HUMIDITY RANGE	RELATIVE HUMIDITY 85% max (NOT DEWED)				
	CURRENT	0.5 A		OPERATING HUMIDITY RANGE					
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 1000HZ)	70 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 FORCES	MEASURED BY APPLICABLE CONNECTOR.			INSERTION FORCE: 84 N MAX. WITHDRAWAL FORCE: 10.3 N MIN.				x	-
MECHANICAL OPERATION	50 TIMES INSERTIONS AND EXTRACTIONS.			① CONTACT RESISTANCE: Δ VARIATION FROM INITIAL VALUE 20 mΩ OR LESS.				x	-
				② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.					
VIBRATION	FREQUENCY 10 TO 55 TO 10HZ, APPROX 5min SINGLE AMPLITUDE : 0.75 mm, 10 CYCLES FOR 3 DIRECTIONS.			① NO ELECTRICAL DISCONTINUITY OF 1 μs.				x	-
SHOCK	490 ms 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: Δ VARIATION FROM INITIAL VALUE 20 mΩ OR LESS.				x	-
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → +85 °C TIME 30 → 30 min. UNDER 5 CYCLES. (RELOCATION TIME TO CHAMBER:WITHIN 2~3 MIN)			② INSULATION RESISTANCE :100 MΩ MIN.				x	-
COLD	EXPOSED AT -55°C, 96 h			③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.					
DRY HEAT	EXPOSED AT 85°C, 96 h			① CONTACT RESISTANCE: Δ VARIATION FROM INITIAL VALUE 20 mΩ OR LESS.				x	-
				② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.					
SULFUR DIOXIDE	EXPOSED AT 25±2°C, 75±5%RH, 25 PPM FOR 96 h. (TEST STANDARD: JIS C 60068)			① NO DEFECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR.				x	-
				② CONTACT RESISTANCE: Δ VARIATION FROM INITIAL VALUE 20 mΩ OR LESS.					
RESISTANCE TO SOLDERING HEAT	1)REFLOW SOLDERING : PEAK TMP : 260°C MAX REFLOW TMP : 220°C MIN FOR 60sec			NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.				x	-
SOLDERABILITY	2) SOLDERING IRONS : 360°C MAX. FOR 5 sec. 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 IMMERSERD.				x	-
COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED		DATE			
4	D1S-F-005857		KT. D01	KI. HIROKAWA		11.11.24			
REMARKS (1) INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING. (2) "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB.									
Note Q1:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-336342-00				
		SPECIFICATION SHEET		PART NO.		FX20-120S-0.5SV			
		HIROSE ELECTRIC CO., LTD.		CODE NO.		QL570-1105-6-00			
		△		1/1					
		FORM HD0011-2-1							