



**THE DATASHEET OF  
FX8-120S-SV(21)**



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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
<b>APPLICATION STANDARD</b>									
RATING	OPERATING TEMPERATURE RANGE	-55 °C TO +85 °C			STORAGE TEMPERATURE RANGE	— °C TO — °C			
	VOLTAGE	100 V AC			OPERATING HUMIDITY RANGE	— % TO — %			
	CURRENT	0.4 A			APPLICABLE CABLE	—			
<b>SPECIFICATIONS</b>									
ITEM		TEST METHOD			REQUIREMENT			QT	AT
<b>CONSTRUCTION</b>									
GENERAL EXAMINATION		VISUALLY AND BY MEASURING INSTRUMENT.			ACCORDING TO DRAWING			○	○
MARKING		CONFIRMED VISUALLY						○	—
<b>ELECTRICAL CHARACTERISTICS</b>									
CONTACT RESISTANCE		100 mA (DC OR 1000 Hz)			45 mΩ MAX.			○	—
CONTACT RESISTANCE MILLIVOLT LEVEL METHOD		20 mV MAX, 1 mA (DC OR 1000 Hz)			55 mΩ MAX.			○	—
INSULATION RESISTANCE		250 V DC			100 MΩ MIN.			○	—
VOLTAGE PROOF		300 V AC FOR 1 min.			NO FLASHOVER OR BREAKDOWN			○	—
<b>MECHANICAL CHARACTERISTICS</b>									
CONTACT INSERTION AND EXTRACTION FORCES		BY STEEL GAUGE.			INSERTION FORCE: N MAX. EXTRACTION FORCE: N MIN.			—	—
INSERTION AND WITHDRAWAL FORCES		MEASURED BY APPLICABLE CONNECTOR.			INSERTION FORCE: (0.7 × ※※) N MAX. WITHDRAWAL FORCE: (0.065 × ※※) N MIN.			○	—
MECHANICAL OPERATION		50 TIMES INSERTION AND EXTRACTIONS.			1) CONTACT RESISTANCE: 55 mΩ MAX. 2) NO DAMAGE, CRACK AND LOOSENESS OF PART.			○	—
VIBRATION		FREQUENCY: 10 TO 55 Hz, SINGLE AMPLITUDE: 0.75 mm, - m/s <sup>2</sup> AT 2 h FOR 3 DIRECTIONS.			1) NO ELECTRICAL DISCONTINUITY OF 1 μs 2) CONTACT RESISTANCE: 55 mΩ MAX. 3) NO DAMAGE, CRACK AND LOOSENESS OF PART.			○	—
SHOCK		490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.						○	—
<b>ENVIRONMENTAL CHARACTERISTICS</b>									
DAMP HEAT (STEADY STATE)		EXPOSED AT 40±2 °C, 90~95 %, 96 h.			1) CONTACT RESISTANCE: 55 mΩ MAX. 2) INSULATION RESISTANCE: 100 MΩ MIN.			○	—
RAPID CHAGE OF TEMPERTURE		TEMPERTURE -55→+5~+35→+85→+5~+35°C TIME 30→10~15→30→10~15 min. UNDER 5 CYCLES.			3) NO DAMAGE, CRACK AND LOOSENESS OF PART.			○	—
DAMP HEAT,CYCLIC		EXPOSED AT TO °C, TO % ,TOTAL CYCLES( h).			1) CONTACT RESISTANCE: mΩ MAX. 2) INSULATION RESISTANCE: MΩ MIN.(AT HIGH HUMIDITY) 3) INSULATION RESISTANCE: MΩ MIN.(AT DRY) 4) NO DAMAGE, CRACK AND LOOSENESS OF PART.			—	—
DRY HEAT		EXPOSED AT °C, h.			1) CONTACT RESISTANCE: mΩ MAX. 2) NO DAMAGE, CRACK AND LOOSENESS OF PART.			—	—
CORROSION SALT MIST		EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.			1) CONTACT RESISTANCE: 55 mΩ MAX. 2) NO HEAVY CORROSION.			○	—
HYDROGEN SULPHIDE		EXPOSED IN 3 PPM FOR 96 h. (TEST STANDARD:JEIDA-38)						○	—
SULPHUR DIOXIDE		EXPOSED IN PPM FOR h. (TEST STANDARD:JEIDA-39)						—	—
RESISTANCE TO SOLDERING HEAT		SOLDER TEMPERATURE, °C FOR IMMERSION,DURATION, s.			NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.			—	—
SOLDRABILITY		SOLDERED AT SOLDER TEMPERATURE, °C FOR IMMERSION DURATION, s.			A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed.			—	—
REMARKS				DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED	
UNLESS OTHERWISE SPECIFIED, REFER TO JIS C 5402.				<i>S. Morita</i> '95.10.31	<i>J. Matsukawa</i> '95.10.31	<i>M. Tomita</i> '95.11.1	<i>Y. Yamamura</i> '95.11.1		
NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST ○: APPLICABLE TEST									
<b>HR5</b> HIROSE ELECTRIC CO.,LTD.		SPECIFICATION SHEET			PART NO. FX8-※※S-SV(21)				
CODE NO.(OLD) CL		DRAWING NO. SLC4-150730-01			CODE NO. CL 578 -		1 1		

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