



**THE DATASHEET OF
FX16M2-51S-0.5SH**



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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: 25.5 N MAX. WITHDRAWAL FORCE: 2.55 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)	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.	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.		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. 04. 20
(1) INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING.			CHECKED	HT. YAMAGUCHI	10. 04. 20
(2) OPERATING TEMPERATURE SHOULD BE -55 TO 40°C WHEN HUMIDITY EXCEEDS 80% RH.			DESIGNED	KN. SHIBUYA	10. 04. 19
(3) "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB.			DRAWN	KN. SHIBUYA	10. 04. 19
(4) THERE MUST NOT BE DEWFALL.					
(5) DON'T INCLUDE 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.	ELC4-330633-00		
HRS	SPECIFICATION SHEET		PART NO.	FX16M2-51S-0. 5SH	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL575-3004-1-00	△ 1/1

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