

May.1.2023 Copyright 2023 HIROSE ELECTRIC CO., LTD. All Rights Reserved.  
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	STORAGE TEMPERATURE RANGE	-40 °C TO 60 °C <sup>(1)</sup>	
	VOLTAGE	50 V AC	OPERATING HUMIDITY RANGE	RELATIVE HUMIDITY 95 % RH MAX. <sup>(2)</sup>	
	STORAGE HUMIDITY RANGE	40 % TO 70 % <sup>(1)</sup>			
	CURRENT	REFER TO FX10-168pin DERATING CURVES FROM TEST REPORTS TR570E-20588			
SPECIFICATIONS					
ITEM	TEST METHOD		REQUIREMENTS	QT	AT
<b>CONSTRUCTION</b>					
GENERAL EXAMINATION	VISUAL AND WITH MEASURING INSTRUMENT.		ACCORDING TO DRAWING.	x	x
MARKING	CONFIRM VISUALLY.			x	x
<b>ELECTRIC CHARACTERISTICS</b>					
CONTACT RESISTANCE [EIA-364-23]	100 mA and 20 mv OPEN CIRCUIT MAX.		60 mΩ MAX.	x	—
INSULATION RESISTANCE [EIA-364-21]	100 V DC.		100 MΩ MIN.	x	—
VOLTAGE PROOF [EIA-364-20]	150 V AC FOR 1 MINUTE.		NO FLASHOVER OR BREAKDOWN.	x	x
<b>MECHANICAL CHARACTERISTICS</b>					
INSERTION AND WITHDRAWAL FORCES [EIA-364-13]	MEASURED BY APPLICABLE CONNECTORS.		INSERTION FORCE: 100.8 N MAX. WITHDRAWAL FORCE: 4.2 N MIN.	x	—
MECHANICAL OPERATION [EIA-364-09]	50 TIMES INSERTIONS AND EXTRACTION.		① CONTACT RESISTANCE CHANGE: 10 mΩ OR LESS ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x	—
RANDOM VIBRATION [EIA-364-28]	FREQUENCY: 20 TO 500 Hz POWER SPECTRAL DENSITY: 0.02 G <sup>2</sup> /Hz OVERALL rms G: 3.1 Grms FOR 15 MINUTES IN THREE DIRECTIONS.		1) NO ELECTRICAL DISCONTINUITY OF 1μs OR MORE. 2) NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	x	—
SHOCK [EIA-364-27]	490 m/s <sup>2</sup> , DURATION OF PULSE: 11 ms 3 EACH DIRECTION, 3 AXIS.			x	—
<b>ENVIRONMENTAL CHARACTERISTICS</b>					
THERMAL SHOCK [EIA-364-32]	TEMPERATURE: -55 → 15 ~ 35 → 85 → 15 ~ 35 °C TIME: 30 → 5 → 30 → 5 min. UNDER 10 CYCLES		1) CONTACT RESISTANCE CHANGE: 10 mΩ OR LESS 2) NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	x	—
CYCLIC TEMPERATURE AND HUMIDITY [EIA-364-31]	@ 25 °C, 80% RH: 60 MIN DWELL TIME 30 MIN RAMP TIME @ 65 °C, 50% RH: 60 MIN DWELL TIME UNDER 24 CYCLES.			x	—
DRY HEAT [EIA-364-17]	EXPOSED AT 105 °C, 1000 hr.			x	—
MIXED FLOWING GAS [EIA-364-65]	EXPOSED AT 30 °C, 70% Cl <sub>2</sub> : 10 ppb, NO <sub>2</sub> : 200 ppb, H <sub>2</sub> S : 10 ppb, SO <sub>2</sub> : 100 ppb UNMATED 7 DAYS, MATED 7 DAYS.		1) CONTACT RESISTANCE CHANGE: 10 mΩ OR LESS 2) NO HEAVY CORROSION.	x	—
REFLOW TEMPERATURE CONDITION [IPC / JEDEC J-STD-020C]	REFLOW PEAK TEMPERATURE : 260 °C AT CONNETOR SURFACE.			x	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
REMARK <sup>(1)</sup> THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. <sup>(2)</sup> NO DEW CONDENSATION IS PERMITTED.			APPROVED	HS. OKAWA	11. 03. 24
			CHECKED	KI. HIROKAWA	11. 03. 24
			DESIGNED	DK. AIMOTO	11. 03. 23
			DRAWN	DK. AIMOTO	11. 03. 23
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC4-330879-01	
	SPECIFICATION SHEET		PART NO.	FX10A-168P-SV2 (93)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL570-0302-1-93	1/1