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 (1)	STORAGE TEMPERATURE RANGE	-10 °C TO 60 °C (2)
	VOLTAGE	100 V AC	STORAGE HUMIDITY RANGE	40 % TO 70 % (2)
	CURRENT	0.5 A (SIGNAL CONTACT) (3) 3 A (MF CONTACT)	OPERATING HUMIDITY RANGE	RELATIVE HUMIDITY 85% max (NOT DEWED)

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	×	×
MARKING	CONFIRMED VISUALLY.		×	×
ELECTRIC CHARACTERISTICS				
CONTACT RESISTANCE	100 mA(DC OR 1000Hz)	SIGNAL CONTACT : 90 mΩ MAX. MF CONTACT : 30 mΩ MAX.	×	—
INSULATION RESISTANCE	250 V DC.	1000 MΩ MIN.	×	—
VOLTAGE PROOF	300 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	×	—
MECHANICAL CHARACTERISTICS				
INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION FORCE: 60 N MAX. WITHDRAWAL FORCE: 6 N MIN.	×	—
MECHANICAL OPERATION	500 TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: SIGNAL CONTACT : 100 mΩ MAX. MF CONTACT : 40 mΩ MAX. 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. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
SHOCK	490 m/s^2, DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.		×	—
ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2 °C, 90 ～ 95 %, 96 h.	① CONTACT RESISTANCE: SIGNAL CONTACT : 100 mΩ MAX. MF CONTACT : 40 mΩ MAX. ② INSULATION RESISTANCE :1000 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → +85 °C TIME 30 → 30 min. UNDER 5 CYCLES. (RELOCATION TIME TO CHAMBER:WITHIN 2～3 MIN)		×	—
SULFUR DIOXIDE	EXPOSED AT 25±2℃, 75±5%RH, 25 PPM FOR 96 h. (TEST STANDARD: JIS C 60068)	NO HEAVY CORROSION.	×	—
RESISTANCE TO SOLDERING HEAT	1)REFLOW SOLDERING : PEAK TMP : 260℃MAX REFLOW TMP: 220℃MIN FOR 60sec 2) SOLDERING IRONS : 360℃ MAX. FOR 5 sec.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.	×	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE 240±3℃ FOR IMMERSION DURATION, 3 sec.	A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	×	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△0					

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.
(3) THE RATED CURRENT APPLIES TO PER CONTACT.

Unless otherwise specified, refer to JIS-C-5402.

APPROVED	HS. OKAWA	11. 09. 29
CHECKED	KI. HIROKAWA	11. 09. 29
DESIGNED	TH. SANO	11. 09. 29
DRAWN	TH. SANO	11. 09. 29

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC4-159084-00

HRS

SPECIFICATION SHEET

HIROSE ELECTRIC CO., LTD.

PART NO. FX18-100S-0.8SH

CODE NO. CL579-0012-9-00 △0 1/1

FORM HD0011-2-1