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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)	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: 80 N MAX. WITHDRAWAL FORCE: 8 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. APPLY 0.4A WHEN ALL THE CONTACTS ARE USED FOR CURRENT CARRYING.
Unless otherwise specified, refer to JIS-C-5402.

APPROVED	HS. OKAWA	11. 03. 24
CHECKED	KI. HIROKAWA	11. 03. 24
DESIGNED	TH. SANO	11. 03. 24
DRAWN	TH. SANO	11. 03. 24

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

DRAWING NO. ELC4-159079-00

HRS

SPECIFICATION SHEET

HIROSE ELECTRIC CO., LTD.

PART NO. FX18-140P-0.8SH

CODE NO. CL579-0007-9-00 ⚠0

FORM HD0011-2-1