

APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-40°C TO 105°C(note1)	STORAGE TEMPERATURE RANGE	-10°C TO 50°C (PACKED CONDITION)	
	VOLTAGE	50 V AC / DC	OPERATING OR STORAGE HUMIDITY RANGE	RELATIVE HUMIDITY 90 % MAX (NOT DEWED)	
	CURRENT	0.5 A (note2)	APPLICABLE CABLE	t=0.3±0.05mm, GOLD PLATING (GND PLATE: t=0.5±0.05mm, TIN PLATING)	
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
ELECTRICAL CHARACTERISTICS					
VOLTAGE PROOF		150 V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.	x x
INSULATION RESISTANCE		100 V DC.		500 MΩ MIN.	x x
CONTACT RESISTANCE		AC 20 mV MAX (1 KHz) , 1 mA .		100 mΩ MAX. INCLUDING FFC BULK RESISTANCE (L=8mm)	x x
MECHANICAL CHARACTERISTICS					
VIBRATION		FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, - m/s ² FOR 10 CYCLES IN 3 AXIAL DIRECTIONS.		① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 100 mΩ MAX.	x -
SHOCK		981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 BOTH AXIAL DIRECTIONS.		③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	-
MECHANICAL OPERATION		20 TIMES INSERTIONS AND EXTRACTIONS.		① CONTACT RESISTANCE: 100 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x -
FFC RETENTION FORCE		MEASURED BY APPLICABLE FPC. (THICKNESS OF FFC SHALL BE t=0.30mm AT INITIAL CONDITION.)		DIRECTION OF INSERTION: 0.3N × n MIN. (note3)	x -
ENVIRONMENTAL CHARACTERISTICS					
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -40→+15 TO +35→+105→+15 TO +35°C TIME 30→ 2 TO 3 → 30 → 2 TO 3 min UNDER 5 CYCLES.		① CONTACT RESISTANCE: 100 mΩ MAX. ② INSULATION RESISTANCE: 50 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x -
DAMP HEAT (STEADY STATE)		EXPOSED AT 40±2°C, RELATIVE HUMIDITY 90 TO 95 %, 96 h.			x -
DAMP HEAT, CYCLIC		EXPOSED AT -10 TO +65 °C, RELATIVE HUMIDITY 90 TO 96 %, 10 CYCLES, TOTAL 240 h.		① CONTACT RESISTANCE: 100 mΩ MAX. ② INSULATION RESISTANCE: 1 MΩ MIN. (AT HIGH HUMIDITY) ③ INSULATION RESISTANCE: 50 MΩ MIN. (AT DRY) ④ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x -
DRY HEAT		EXPOSED AT 105±2 °C, 96 h.		① CONTACT RESISTANCE: 100 mΩ MAX.	x -
COLD		EXPOSED AT -40±3°C, 96 h.		② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x -
COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED	DATE
△					
REMARK			APPROVED	NF. MIYAZAKI	17. 04. 24
			CHECKED	FN. TAMURA	17. 04. 24
Unless otherwise specified, refer to IEC 60512.			DESIGNED	HK. KINOUCHI	17. 04. 24
			DRAWN	KY. KIKUCHI	17. 04. 24
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-348380-05-00
HRS	SPECIFICATION SHEET		PART NO.	FH41-15S-0. 5SH (05)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL580	△ 1/2

SPECIFICATIONS				
ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CORROSION SALT MIST	EXPOSED AT 35±2℃ , 5 % SALT WATER SPRAY FOR 96 h.	① CONTACT RESISTANCE: 100 mΩ MAX. ② NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x	—
SULPHUR DIOXIDE [JIS C 60068-2-42]	EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% ,25±5 ppm FOR 96 h.		x	—
HYDROGEN SULPHIDE [JIS C 60068-2-43]	EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% ,10 TO 15 ppm FOR 96 h.		x	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 245±5 °C FOR IMMERSION DURATION, 2±0.5 sec.	A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	x	—
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING PEAK TMP. 250 °C MAX . REFLOW TMP. OVER 230 °C WITHIN 60 sec. 2) SOLDERING IRONS : TMP. 350±10℃ FOR 5±1 sec .	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	x	—

(note1)

FOLLOW THE SPECIFICATIONS OF FFC IF IT'S ALLOWABLE MAXIMUM OPERATING TEMPERATURE IS BELOW 105℃.

(note2)

WHEN THE SAME VALUE OF CURRENT ARE APPLIED TO ALL CONTACTS AT THE SAME TIME IN ONCE,
SET THE CURRENT TO THE 70 % OF THE RATED CURRENT VALUE.

(note3)

THERE'S A CASE WHICH FFC RETENTION FORCE DOESN'T FULFILL THE VALUE,
BECAUSE FFC SPECIFICATION AFFECTS THE RESULT OF FFC RETENTION FORCE.

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