

APPLICABLE STANDARD		△					
RATING	OPERATING TEMPERATURE RANGE	-40°C TO 105°C( <b>note1</b> )		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 ( <b>note2</b> )		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.	✗ ✗		
MARKING	CONFIRMED VISUALLY.				✗ ✗		
ELECTRICAL CHARACTERISTICS							
VOLTAGE PROOF	150 V AC FOR 1 min.			NO FLASHOVER OR BREAKDOWN.	✗ ✗		
INSULATION RESISTANCE	100 V DC.			500 MΩ MIN.	✗ ✗		
CONTACT RESISTANCE	AC 20 mV MAX (1 KHz), 1 mA .			100 mΩ MAX. INCLUDING FFC BULK RESISTANCE (L=8mm)	✗ ✗		
MECHANICAL CHARACTERISTICS							
VIBRATION	FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, - m/s <sup>2</sup> FOR 10 CYCLES IN 3 AXIAL DIRECTIONS.			① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 100 mΩ MAX.	✗ —		
SHOCK	981 m/s <sup>2</sup> , 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.	✗ —		
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.	✗ —		
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.	✗ —		
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2°C, RELATIVE HUMIDITY 90 TO 95 %, 96 h.				✗ —		
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.	✗ —		
DRY HEAT △	EXPOSED AT 105±2 °C, 96 h.			① CONTACT RESISTANCE: 100 mΩ MAX.	✗ —		
COLD	EXPOSED AT -40±3°C, 96 h.			② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	✗ —		
	COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED		
△	7	DIS-F-00001058		HK. KINOUCHI	HS. SAKAMOTO		
REMARK				APPROVED	MO. ISHIDA		
				CHECKED	YN. TAKASHITA		
				DESIGNED	YK. OTSUKA		
Unless otherwise specified, refer to IEC 60512. △				DRAWN	YK. OTSUKA		
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-325208-00		
HRS	SPECIFICATION SHEET			PART NO.			
	HIROSE ELECTRIC CO., LTD.			CODE NO.	CL580		
△		1/2					

## SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CORROSION SALT MIST	EXPOSED AT $35 \pm 2^\circ\text{C}$ , 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 $40 \pm 2^\circ\text{C}$ , RELATIVE HUMIDITY $80 \pm 5\%$ , $25 \pm 5$ ppm FOR 96 h.		X	—
HYDROGEN SULPHIDE △ [JIS C 60068-2-43]	EXPOSED AT $40 \pm 2^\circ\text{C}$ , RELATIVE HUMIDITY $80 \pm 5\%$ , $10$ to $15$ ppm FOR 96 h.		X	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, $245 \pm 5^\circ\text{C}$ FOR IMMERSION DURATION, $2 \pm 0.5$ 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. $250^\circ\text{C}$ MAX. REFLOW TMP. OVER $230^\circ\text{C}$ WITHIN 60 sec. 2) SOLDERING IRONS : TMP. $350 \pm 10^\circ\text{C}$ FOR $5 \pm 1$ 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  $105^\circ\text{C}$ .

(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.

Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.		ELC4-325208-00	
<b>HS</b>	SPECIFICATION SHEET	PART NO.	FH41-**S-0.5SH(05)		
	HIROSE ELECTRIC CO., LTD.	CODE NO	CL580	△	2/2