

APPLICABLE STANDARD		①						
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.	×			
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 ² FOR 10 CYCLES IN 3 AXIAL DIRECTIONS.			① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 100 mΩ MAX. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×			
SHOCK	981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 BOTH AXIAL DIRECTIONS.				—			
MECHANICAL OPERATION	20 TIMES INSERTIONS AND EXTRACTIONS.				—			
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 ①	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 ①	EXPOSED AT 105±2 °C, 96 h.				—			
COLD	EXPOSED AT -40±3°C, 96 h.				—			
	COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED			
①	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. ①				DRAWN	YK. OTSUKA			
Note QT: Qualification Test AT: Assurance Test X: Applicable Test			DRAWING NO.		ELC4-325208-00			
HRS	SPECIFICATION SHEET			PART NO.	FH41-**S-0.5SH (05)			
	HIROSE ELECTRIC CO., LTD.			CODE NO.	CL580			
		①		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 ± 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 ± 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. $350 \pm 10^\circ\text{C}$ 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°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.

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	HIROSE ELECTRIC CO., LTD.	CODE NO	CL580	△ 2/2