



APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	Δ -40 °C TO 105 °C	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 (note 1)	APPLICABLE CABLE	t=0.3±0.05mm, GOLD 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
ELECTRIC CHARACTERISTICS					
CONTACT RESISTANCE		1mA(DC OR 1000Hz).		50 mΩ MAX. INCLUDING FPC,FPC BULK RESISTANCE (L=8mm)	x x
INSULATION RESISTANCE		100 V DC.		500 MΩ MIN.	x x
VOLTAGE PROOF		150 V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.	x x
MECHANICAL CHARACTERISTICS					
MECHANICAL OPERATION		20 TIMES INSERTIONS AND EXTRACTIONS.		① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x —
VIBRATION		FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, FOR 10 CYCLES IN 3 DIRECTIONS.		① NO ELECTRICAL DISCONTINUITY OF 1 μs.	x —
SHOCK		981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 DIRECTIONS.		② CONTACT RESISTANCE: 50 mΩ MAX. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x —
FPC RETENSION FORCE		MEASURED BY APPLICABLE FPC. (CONNECTOR,FPC AT INITIAL CONDITION. THICKNESS OF FPC SHALL BE t=0.30mm)		DIRECTION OF INSERTION: 0.4xn N MIN (n : NUMBER OF CONTACTS).	x —
ENVIRONMENTAL CHARACTERISTICS					
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -40→+15T ₀ +35→+105→+15T ₀ +35°C TIME 30→ 2 TO 3 → 30→ 2 TO 3 min. UNDER 5 CYCLES.		① CONTACT RESISTANCE: 50 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: 50 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: 50 mΩ MAX.	x —
COLD		EXPOSED AT -40±3°C, 96 h.		② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x —
CORROSION SALT MIST		EXPOSED AT 35±2 °C 5% SALT WATER SPRAY FOR 96 h.		① CONTACT RESISTANCE: 50 mΩ MAX. ② NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.	x —
SURPHUR 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 —
COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED	DATE
Δ 6	DIS-F-00000491		SG. MASAKI	HS. SAKAMOTO	15. 07. 25
REMARK			APPROVED	MO. ISHIDA	10. 05. 13
			CHECKED	NM. NISHIMATSU	10. 05. 13
Δ			DESIGNED	YS. EBI	10. 05. 12
Unless otherwise specified, refer to IEC 60512.			DRAWN	YS. EBI	10. 05. 12
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-328248-00
HRS		SPECIFICATION SHEET	PART NO.	FH52-**S-0. 5SH	
		HIROSE ELECTRIC CO., LTD.	CODE NO.	CL580	Δ 1/2

SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING (TO BE 2 TIMES MAX.) PEAK TMP. 250 °C MAX REFLOW TMP. 230 °C MIN FOR 30 sec. PRE-HEATING. 150 TO 200°C 90 TO 120 sec. SOLDERING IRONS : 350 ± 10 °C, FOR 5± 1 sec .	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—	
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 235±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	—	
<p>(note 1)</p> <p>WHEN THE SAME VALUE OF CURRENT ARE APPLID TO ALL CONTACTS AT THE SAME TIME IN ONCE, SET THE CURRENT TO THE 70 % OF THE RATED CURRENT VALUE.</p>					
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	HIROSE ELECTRIC CO., LTD.	CODE NO	CL580		2/2