

APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-55 °C TO 85 °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±0.03mm, GOLD PLATING	
SPECIFICATIONS					
ITEM	TEST METHOD		REQUIREMENTS	QT	AT
CONSTRUCTION					
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.		ACCORDING TO DRAWING.	×	×
MARKING	CONFIRMED VISUALLY.			×	×
ELECTRIC 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 FPC,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 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 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.	×	—
FPC RETENTION FORCE	MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.30mm AT INITIAL CONDITION.)		① DIRECTION OF INSERTION : 0.15N × n MIN. ② VERTICAL DIRECTION OF INSERTION : 0.15N × n MIN. (note 2)	×	—
LOCK OPERATION FORCE	MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.30mm AT INITIAL CONDITION.)		① CLOSING FORCE : 0.3N × n MAX.(4 ~ 10 POS.) 0.1N × n MAX.(11 ~ 50 POS.) ② OPENING FORCE : 0.05N × n MIN.	×	—
ENVIRONMENTAL CHARACTERISTICS					
CORROSION SALT MIST	EXPOSED AT 35 °C , 5 % SALT WATER SPRAY FOR 96 h.		① CONTACT RESISTANCE: 100 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. ③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.	×	—
RAPID CHANGE OF TEMPERATURE	TEMPERATURE-55→+15T <sub>0</sub> +35→+85→+15T <sub>0</sub> +35°C TIME 30→ 2~3 → 30→ 2~3 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 °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.	×	—
COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED	DATE
REMARK				APPROVED	NM. NISHIMATSU 10.11.01
				CHECKED	HS. SAKAMOTO 10.11.01
				DESIGNED	TS. OONO 10.10.29
				DRAWN	TS. OONO 10.10.29
Unless otherwise specified, refer to JIS C 5402.			DRAWING NO.		ELC4-155198-07
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-155198-07
<b>HRS</b>	SPECIFICATION SHEET		PART NO.	FH19SC-**S-0.5SH(09)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL580	△ 1/2

SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
DRY HEAT	EXPOSED AT 85 °C, 96 h.	① CONTACT RESISTANCE: 100 mΩ MAX.	X	—	
COLD	EXPOSED AT -55°C, 96 h.	② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—	
SURPHUR DIOXIDE [JIS C 0090]	EXPOSED AT 40 °C , RELATIVE HUMIDITY 80% , 25 PPM FOR 96 h.	① CONTACT RESISTANCE: 100 mΩ MAX.	X	—	
HYDROGEN SULPHIDE [JIS C 0092]	EXPOSED AT 40 °C , RELATIVE HUMIDITY 80% , 10 ~ 15 PPM FOR 96 h.	② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. ③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.	X	—	
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 235 °C FOR IMMERSION DURATION, 2 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. 230 °C MIN FOR 60 sec. 2) SOLDERING IRONS : TMP. 350 ± 5 °C FOR 5 sec .	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—	
<p><b>(note 1)</b></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> <p><b>(note 2)</b></p> <p>THIS PRODUCT HAS FLIP-LOCK CONSTRUCTION. FASTEN FPC ON PCB OR SOMETHING FIXED IF FORCE IN VERTICAL DIRECTION SHALL BE PREDICTED.</p>					
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<b>HRS</b>	SPECIFICATION SHEET		PART NO.	FH19SC-**S-0.5SH(09)	
	HIROSE ELECTRIC CO., LTD.		CODE NO	CL580	△ 2/2