

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 ² FOR 10 CYCLES IN 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF μs. ② CONTACT RESISTANCE: 100 mΩ MAX.	×	—
SHOCK		981 m/s ² , 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→+15TO+35→+85→+15TO+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.					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-155198-07
HRS	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	—