

APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-55 °C TO 85 °C	STORAGE TEMPERATURE RANGE	-10 °C TO 50 °C (PACKED CONDITION)	
	VOLTAGE	40 V AC / DC	OPERATING OR STORAGE HUMIDITY RANGE	RELATIVE HUMIDITY 90 % MAX (NOT DEWED)	
	CURRENT	0.4 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		120 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, FOR 10 CYCLES IN 3 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 <sup>2</sup> , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 AXIAL DIRECTIONS.		×	—
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.)	DIRECTION OF INSERTION : 0.15×n N MIN ( n : NUMBER OF CONTACTS ). (note 2)	×	—
ENVIRONMENTAL CHARACTERISTICS					
CORROSION SALT MIST		EXPOSED AT 35±2 °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 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.	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.	×	—
DAMP HEAT,CYCLIC		EXPOSED AT -10 TO +65 °C, RELATIVE HUMIDITY 90 TO 96 %, 10 CYCLES, TOTAL 240 h.		×	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△					
REMARK			APPROVED	MO. ISHIDA	13. 08. 23
			CHECKED	YN. TAKASHITA	13. 08. 23
			DESIGNED	SI. TAMAKI	13. 08. 23
			DRAWN	TO. HATTORI	13. 08. 23
Unless otherwise specified, refer to JIS C 5402.					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-349488-00
HRS	SPECIFICATION SHEET		PART NO.	FH55M-**S-0. 4SH	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL580	△ 1/2

SPECIFICATIONS					
ITEM		TEST METHOD	REQUIREMENTS	QT	AT
DRY HEAT		EXPOSED AT 85±2 °C, 96 h.	① CONTACT RESISTANCE: 100 mΩ MAX.	x	—
COLD		EXPOSED AT -55±3°C, 96 h.	② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x	—
SURPHUR DIOXIDE [JIS C 0090]		EXPOSED AT 40±2 °C, RELATIVE HUMIDITY 80±5% 25±5 PPM FOR 96 h.	① CONTACT RESISTANCE: 100 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x	—
HYDROGEN SULPHIDE [JIS C 0092]		EXPOSED AT 40±2 °C, RELATIVE HUMIDITY 80±5% , 10 TO 15 PPM FOR 96 h.	③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.	x	—
SOLDERABILITY		SOLDERED AT SOLDER TEMPERATURE, 245±3°C FOR IMMERSION DURATION, 3±0.3 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±10 °C FOR 5±1 sec .	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	x	—
<div>(note1)</div> <div>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.</div> <div>(note2)</div> <div>THIS PRODUCT HAS FLIP-LOCK CONSTRUCTION. FASTEN FPC ON PCB OR SOMETHING FIXED IF FORCE IN VERTICAL DIRECTION SHALL BE PREDICTED.</div>					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-349488-00
<div>HRSHIROSE ELECTRIC CO., LTD.</div>		SPECIFICATION SHEET		PART NO. FH55M-***S-0.4SH	
		HIROSE ELECTRIC CO., LTD.		CODE NO CL580	
				<div>△</div>	2/2