


APPLICABLE STANDARD						
RATING	OPERATING TEMPERATURE RANGE	-55°C TO +85°C	STORAGE TEMPERATURE RANGE	-10°C TO +50°C(PACKED CONDITION)		
	VOLTAGE	30V AC/DC	OPERATING OR STORAGE HUMIDITY RANGE	RELATIVE HUMIDITY 90%MAX(NOT DEWED)		
	CURRENT	0.2A	APPLICABLE CABLE	t=0.12±0.02mm, GOLD PLATED		
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		90V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.	×	×
INSULATION RESISTANCE		100V DC.		50MΩ MIN.	×	×
CONTACT RESISTANCE		AC 20mV MAX (1KHz), 1mA.		200mΩ MAX. INCLUDING FPC 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 μ s. ② CONTACT RESISTANCE: 200mΩ MAX. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
SHOCK		981 m/s <sup>2</sup> , DURATION OF PULSE 6ms AT 3 TIMES IN 3 DIRECTIONS.			×	—
MECHANICAL OPERATION		10 TIMES INSERTIONS AND EXTRACTIONS.		① CONTACT RESISTANCE: 200mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
FPC RETENSION FORCE		MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.12mm AT INITIAL CONDITION.)		DIRECTION OF INSERTION: 0.05N × NUMBER OF CONTACTS + 2N MIN. (note1)	×	—
ENVIRONMENTAL CHARACTERISTICS						
CORROSION SALT MIST		EXPOSED AT 35±2°C, 5% SALT WATER SPRAY FOR 96h.		① CONTACT RESISTANCE: 200mΩ 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→+15 TO +35→+85→+15 TO +35 °C TIME 30 → 2~3 → 30 → 2~3 min UNDER 5 CYCLES.			×	—
DAMP HEAT (STEADY STATE)		EXPOSED AT 40±2°C, RELATIVE HUMIDITY 90 TO 95%, 96h.			×	—
DAMP HEAT,CYCLIC		EXPOSED AT -10 TO +65 °C RELATIVE HUMIDITY 90 TO 96 % 10 CYCLES, TOTAL 240h.		① CONTACT RESISTANCE: 200mΩ MAX. ② INSULATION RESISTANCE: 1MΩ MIN. (AT HIGH HUMIDITY) ③ INSULATION RESISTANCE: 50MΩ MIN. (AT DRY) ④ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE	
△						
REMARK				APPROVED	MO.ISHIDA	10.04.01
				CHECKED	NM.NISHIMATSU	10.04.01
				DESIGNED	HY.YAMAZAKI	10.04.01
				DRAWN	HY.YAMAZAKI	10.04.01
Unless otherwise specified, refer to JIS C 5402.						
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-322505-01	
HRS	SPECIFICATION SHEET		PART NO.	FH42-**S-0.3SHW(10)		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	△ 1/2		

SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
DRY HEAT	EXPOSED AT $85 \pm 2^{\circ}\text{C}$ , 96h.	① CONTACT RESISTANCE: $200\text{m}\Omega$ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—	
COLD	EXPOSED AT $-55 \pm 3^{\circ}\text{C}$ , 96h.		×	—	
SURPHUR DIOXIDE [JIS C 0090]	EXPOSED AT $40 \pm 2^{\circ}\text{C}$ , RELATIVE HUMIDITY $80 \pm 5\%$ , $25 \pm 5$ ppm FOR 96h.	① CONTACT RESISTANCE: $200\text{m}\Omega$ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—	
HYDROGEN SULPHIDE [JIS C 0092]	EXPOSED AT $40 \pm 2^{\circ}\text{C}$ , RELATIVE HUMIDITY $80 \pm 5\%$ , 10 TO 15 ppm FOR 96h.	③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.	×	—	
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, $235 \pm 5^{\circ}\text{C}$ FOR IMMERSION DURATION, $2 \pm 0.5$ sec.	A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed.	×	—	
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING: PEAK TMP. $250^{\circ}\text{C}$ MAX. REFLOW TMP. $230^{\circ}\text{C}$ MIN WITHIN 60 sec. 2) SOLDERING IRONS: TMP. $350 \pm 10^{\circ}\text{C}$ FOR $5 \pm 1$ sec.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	×	—	
<p><b>(note1)</b></p> <p>FASTEN FPC ON PCB OR SOMETHING FIXED IF FORCE IN VERTICAL DIRECTION SHALL BE PREDICTED. DO NOT CLOSE THE ACTUATOR BEFORE INSERTING FPC EVEN AFTER THE CONNECTOR IS MOUNTED ONTO A PCB. CLOSING THE ACTUATOR WITHOUT FPC COULD MAKE THE CONTACT GAP SMALLER, WHICH INCREASES THE FPC INSERTION FORCE. THIS CONNECTOR HAS CONTACTS ON THE TOP.</p>					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.		ELC4-322505-01	
<b>HRS</b>	SPECIFICATION SHEET		PART NO.	FH42-**S-0.3SHW(10)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL580	 2/2