



APPLICABLE STANDARD						
RATING	OPERATING TEMPERATURE RANGE	-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		
CONSTRUCTION						
GENERAL EXAMINATION		VISUALLY AND BY MEASURING INSTRUMENT.		ACCORDING TO DRAWING.	×	
MARKING		CONFIRMED VISUALLY.			×	
ELECTRICAL CHARACTERISTICS						
CONTACT RESISTANCE		AC 20 mV MAX (1 KHz) , 1 mA .		50 mΩ MAX. INCLUDING FPC,FPC BULK RESISTANCE (L=8 mm)	×	
INSULATION RESISTANCE		100 V DC.		500 MΩ MIN.	×	
VOLTAGE PROOF		150 V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.	×	
MECHANICAL CHARACTERISTICS						
MECHANICAL OPERATION		20 TIMES INSERTIONS AND EXTRACTIONS.		① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	×	
VIBRATION		FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm FOR 10 CYCLES IN 3 AXIAL DIRECTIONS.		① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 50 mΩ MAX. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	×	
SHOCK		981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 BOTH AXIAL DIRECTIONS.			×	
FPC RETENSION FORCE		MEASURED BY APPLICABLE FPC. (CONNECTOR, FPC AT INITIAL CONDITION. THICKNESS OF FPC SHALL BE t=0.3 mm)		DIRECTION OF INSERTION: 0.4×n N MIN (n : NUMBER OF CONTACTS) (note 2)	×	
ENVIRONMENTAL CHARACTERISTICS						
RAPID CHANGE OF TEMPERATURE		TEMPERATURE-40→+15TO+35→+105→+15TO+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 OR LOOSENESS OF PARTS.	×	
DAMP HEAT (STEADY STATE)		EXPOSED AT 40±2 °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: 50 mΩ MAX. ② INSULATION RESISTANCE: 1 MΩ MIN. (AT HIGH HUMIDITY) ③ INSULATION RESISTANCE: 50 MΩ MIN. (AT DRY) ④ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	×	
DRY HEAT		EXPOSED AT 105±2 °C, 96 h.		① CONTACT RESISTANCE: 50 mΩ MAX.	×	
COLD		EXPOSED AT -40±3 °C, 96 h.		② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	×	
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE	
△						
REMARK			APPROVED	HS. HIRAHARA	20210406	
			CHECKED	HS. HIRAHARA	20210406	
			DESIGNED	NM. YONEYAMA	20210330	
			DRAWN	DS. HIROWATARI	20210326	
Unless otherwise specified, refer to JIS C 5402 and IEC 60512.						
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-153990-10-00	
HRS	SPECIFICATION SHEET		PART NO.	FH28-55S-0. 5SH (10)		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0586-1800-0-10	△ 1/2	

SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
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.	×	—	
SULPHUR DIOXIDE [JIS C 60068-2-42]	EXPOSED AT 40±2 °C, RELATIVE HUMIDITY 80±5% ,25±5 ppm FOR 96 h.		×	—	
HYDROGEN SULPHIDE [JIS C 60068-2-43]	EXPOSED AT 40±2 °C, RELATIVE HUMIDITY 80±5% ,10 TO 15 ppm FOR 96 h.		×	—	
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING (MAX 2 CYCLES) PEAK TMP. 250 °C MAX. REFLOW TMP.OVER 230 °C WITHIN 60 sec. PRE-HEAT 150 TO 200 °C FOR 90 TO 120 sec. 2) SOLDERING IRONS : TMP. 350±10 °C FOR 5±1 sec .	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	×	—	
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.	×	—	
<p>(note 1)</p> <p>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.</p> <p>(note 2)</p> <p>THERE'S A CASE WHICH FPC/FFC RETENTION FORCE DOESN'T FULFILL THE VALUE, BECAUSE FPC/FFC SPECIFICATION AFFECTS THE RESULT OF FPC/FFC RETENTION FORCE.</p>					
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