




APPLICABLE STANDARD						
RATING	OPERATING TEMPERATURE RANGE	-55 °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	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.				
ELECTRICAL CHARACTERISTICS						
VOLTAGE PROOF		250 V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.		
INSULATION RESISTANCE		100 V DC.		500 MΩ MIN.		
CONTACT RESISTANCE		AC/DC 20 mV MAX (AC:1 KHz) , 1 mA .		100 mΩ MAX. INCLUDING FPC,FPC BULK RESISTANCE (L=8mm)		
MECHANICAL CHARACTERISTICS						
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.		
SHOCK		981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 BOTH AXIAL DIRECTIONS.		② CONTACT RESISTANCE: 100 mΩ MAX. 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.)		DIRECTION OF INSERTION : (TOP CONTACT) 0.2N × NUMBER OF CONTACTS + 2.5 MIN. (BOTTOM CONTACT) 0.3N × NUMBER OF CONTACTS + 2.5 MIN. (note 1)		
ENVIRONMENTAL CHARACTERISTICS						
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -55→+15TO+35→+105→+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.		① CONTACT RESISTANCE: 100 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		
DRY HEAT		EXPOSED AT 105±2 °C, 96 h		① CONTACT RESISTANCE: 100 mΩ MAX.		
COLD		EXPOSED AT -55±3°C, 96 h.		② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		
	COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED	DATE
	1	DIS-F-00014061		SE. YOKOYAMA	HY. YAMAZAKI	20220531
REMARK				APPROVED	YN. TAKASHITA	20190409
This product is RoHS compliant. Unless otherwise specified, refer to IEC 60512.				CHECKED	SJ. OKAMURA	20190409
				DESIGNED	NY. YAMASHIRO	20190408
				DRAWN	NY. YAMASHIRO	20190408
Note QT:Qualification Test AT:Assurance Test X:Applicable Test				DRAWING NO.		ELC-387736-50-00
	SPECIFICATION SHEET			PART NO.	FH34D-*S-0. 5SH (50)	
	HIROSE ELECTRIC CO., LTD.			CODE NO.	CL580	1/2

SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
SULPHUR DIOXIDE [JIS C 60068-2-42]	EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% 25±5 ppm FOR 96 h.	① CONTACT RESISTANCE: 100 mΩ MAX.	x	—	
		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±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.	x	—	
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING : PEAK TMP. 250 °C MAX . REFLOW TMP. OVER 230 °C WITHIN 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><p>(note1)</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.</p><p>THIS CONNECTOR HAS CONTACTS ON THE BOTH TOP AND BOTTOM.</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></div>					
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