





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=0.2±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 <sup>2</sup> FOR 10 CYCLES IN 3 DIRECTIONS.		① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 100 mΩ MAX.	× —
SHOCK		981 m/s <sup>2</sup> , 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 RETENSION FORCE		MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.20mm 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=0.20mm AT INITIAL CONDITION.)		① CLOSING FORCE : 0.3N×n MAX. (4 ~ 8 POS.) 0.1N×n MAX. (9 ~ 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→+15 TO +35→+85→+15 TO +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
①					
REMARK			APPROVED	RI.TAKAYASU	05.10.17
			CHECKED	HY.KISHI	05.10.14
			DESIGNED	KK.FURUKAWA	05.10.12
			DRAWN	KK.FURUKAWA	05.10.12
Unless otherwise specified, refer to JIS C 5402.			DRAWING NO.	ELC4-155218-02	
Note QT:Qualification Test AT:Assurance Test X:Applicable Test					
	SPECIFICATION SHEET		PART NO.	FH19C-**S-0.5SH(10)	
	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. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x	—
HYDROGEN SULPHIDE [JIS C 0092]	EXPOSED AT 40 °C , RELATIVE HUMIDITY 80% , 10 ~ 15 PPM FOR	96 h.	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	—
<p>(note 1)</p> <p>WHEN THE SAME VALUE OF CURRENT ARE APPLID 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>THIS PRODUCT HAS FLIP-LOCK CONSTRUCTION. FASTEN FPC ON PCB OR SOMETHING FIXED IF FORCE IN VERTICAL DIRECTION SHALL BE PREDICTED.</p>					
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