

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.	x	x
MARKING	CONFIRMED VISUALLY.			x	x
ELECTRICAL CHARACTERISTICS					
VOLTAGE PROOF	150 V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.	x	x
INSULATION RESISTANCE	100 V DC.		500 MΩ MIN.	x	x
CONTACT RESISTANCE	AC 20 mV MAX (1 KHz), 1 mA .		100 mΩ MAX. INCLUDING FPC,FFC BULK RESISTANCE (L=8mm)	x	x
MECHANICAL CHARACTERISTICS					
VIBRATION	FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, — m/s ² FOR 10 CYCLES IN 3 AXIAL DIRECTIONS		① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 100 mΩ MAX. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x	—
SHOCK	981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 BOTH AXIAL DIRECTIONS			x	—
MECHANICAL OPERATION	20 TIMES INSERTIONS AND EXTRACTATIONS.		① CONTACT RESISTANCE: 100 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x	—
FPC RETENTION 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)	x	—
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.	x	—
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.	x	—
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55→+15to+35→+85→+15to+35°C TIME 30→ 2to3 → 30→ 2to3 min UNDER 5 CYCLES.		① CONTACT RESISTANCE: 100 mΩ MAX. ② INSULATION RESISTANCE: 50 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x	—
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 °C, RELATIVE HUMIDITY 90 TO 95 %, 96 h.			x	—
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.	x	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	0				
REMARK			APPROVED	NF. MIYAZAKI	16.03.31
			CHECKED	YH. MICHIDA	16.03.30
			DESIGNED	KN. KOBAYASHI	16.03.30
Unless otherwise specified, refer to IEC 60512.			DRAWN	RN. IIDA	16.03.24
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC-155218-99-00	
HRS	SPECIFICATION SHEET		PART NO.	FH19C-**S-0.5SH(99)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL580	0 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	—
SULPHUR DIOXIDE [JIS C 60068-2-42]	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 60068-2-43]	EXPOSED AT 40 °C , RELATIVE HUMIDITY 80% , 10 TO 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. OVER 230°C WITHIN 60 sec. 2) SOLDERING IRONS : TMP. 350 ± 5 °C FOR 5 sec .	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	x	—

(note 1)

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.

(note 2)

THIS PRODUCT HAS FLIP-LOCK CONSTRUCTION. FASTEN FPC ON PCB OR SOMETHING FIXED IF
FORCE IN VERTICAL DIRECTION SHALL BE PREDICTED.

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

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