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 BULK RESISTANCE (L=8mm)	×	×
MECHANICAL CHARACTERISTICS				
VIBRATION	FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, — m/s^2 FOR 10 CYCLES IN 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 100 mΩ MAX.	×	—
SHOCK	981 m/s^2 , 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 RETENTION FORCE	MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.20mm AT INITIAL CONDITION.)	① DIRECTION OF INSERTION : 1.05N MIN.(TARGET VALUE 5N) ② VERTICAL DIRECTION OF INSERTION : 1.05N MIN. (TARGET VALUE 2.1N)(***note 2***)	×	—
LOCK OPERATION FORCE	MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.20mm AT INITIAL CONDITION.)	① CLOSING FORCE : 2.1N MAX. ② OPENING FORCE : 0.35N 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→+15TO+35→+85→+15TO+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
A					

REMARK

Unless otherwise specified, refer to JIS C 5402.

APPROVED	RI. TAKAYASU	08. 11. 07
CHECKED	TH. MURAI	08. 11. 07
DESIGNED	SI. MIZUSAWA	08. 11. 06
DRAWN	SI. MIZUSAWA	08. 11. 06

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

DRAWING NO. ELC4-157728-01

HRS

SPECIFICATION SHEET

HIROSE ELECTRIC CO., LTD.

PART NO. FH19D-7S-0.5SH

CODE NO. CL580-2500-3-00 A

FORM HD0011-2-1

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
DRY HEAT	EXPOSED AT 85 °C, 96 h.	① CONTACT RESISTANCE: 100 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
COLD	EXPOSED AT -55°C, 96 h.		×	—
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. ③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.	×	—
HYDROGEN SULPHIDE [JIS C 0092]	EXPOSED AT 40 °C , RELATIVE HUMIDITY 80% , 10 ～ 15 PPM FOR 96 h.		×	—
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.	×	—
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.	×	—

(***note 1***)

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.

(***note 2***)

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