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***)	APPLICABLE CABLE	t=0.3±0.05mm, 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**				
CONTACT RESISTANCE	AC 20 mV MAX (1 KHz) , 1 mA .	50 mΩ MAX. INCLUDING FPC,FFC BULK RESISTANCE (L=8mm)	×	×
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 AND LOOSENESS OF PARTS.	×	—
⚠ 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: 50 mΩ MAX. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
⚠ SHOCK	981 m/s^2 , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 BOTH AXIAL DIRECTIONS.			
⚠ FPC RETENTION FORCE	MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.30mm AT INITIAL CONDITION.)	DIRECTION OF INSERTION: 0.3N × n MIN. VERTICAL DIRECTION TO INSERTION: 0.2N × n MIN. (n:NUMBER OF CONTACTS)	×	—
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 AND 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 AND LOOSENESS OF PARTS.	×	—
⚠ DRY HEAT	EXPOSED AT 105±2 °C, 96 h.	① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
COLD	EXPOSED AT -40±3°C, 96 h.		×	—
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.		×	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
⚠1	11	DIS-F-00000943	RT. IKEDA	HS. SAKAMOTO	15. 12. 24

REMARK

⚠

Unless otherwise specified, refer to IEC 60512.

APPROVED	MO. ISHIDA	09. 01. 21
CHECKED	YN. TAKASHITA	09. 01. 20
DESIGNED	HH. TSUKUMO	09. 01. 20
DRAWN	HH. TSUKUMO	09. 01. 20

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

DRAWING NO. ELC4-159298-00

HRS	SPECIFICATION SHEET	PART NO.	FH40-**S-0.5SV	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL580 ⚠1	1/2

FORM HD0011-2-1

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
⚠ RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING PEAK TMP. 250 ℃ MAX . REFLOW TMP. OVER 230 ℃ WHITIN 60 sec. 2) SOLDERING IRONS : TMP. 350±5℃ FOR 5±1 sec .	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	×	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 245±5 ℃ FOR IMMERSION DURATION, 2±0.5 sec.	A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	×	—

(***note***)

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.