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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

APPLICABLE STANDARD						
RATING	OPERATING TEMPERATURE RANGE	-40 °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)	APPLICABLE CABLE	CONDUCTOR END: t=0.3±0.05mm, GOLD PLATING GROUND PLATE: t=0.5±0.05mm, TIN 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
ELECTRIC 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 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 DIRECTIONS.		① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 100 mΩ MAX.		X -
SHOCK		981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 DIRECTIONS.		③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		X -
MECHANICAL OPERATION		20 TIMES INSERTIONS AND EXTRACTIONS.		① CONTACT RESISTANCE: 100 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		X -
FFC RETENSION FORCE		MEASURED BY APPLICABLE FPC. (THICKNESS OF FFC SHALL BE t=0.30mm AT CONDUCTOR END, t=0.50mm AT GROUND PLATE AT INITIAL CONDITION.)		DIRECTION OF INSERTION: 0.3N × n MIN.		X -
ENVIRONMENTAL CHARACTERISTICS						
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -40 → +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.		X -
DAMP HEAT (STEADY STATE)		EXPOSED AT 40±2°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 -
DRY HEAT		EXPOSED AT 85±2 °C, 96 h.		① CONTACT RESISTANCE: 100 mΩ MAX.		X -
COLD		EXPOSED AT -40±3°C, 96 h.		② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		X -
COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED	DATE	
△						
REMARK				APPROVED	MO. ISHIDA	10.06.08
				CHECKED	YN. TAKASHITA	10.06.08
				DESIGNED	SJ. OKAMURA	10.06.08
Unless otherwise specified, refer to JIS C 5402.				DRAWN	SJ. OKAMURA	10.06.08
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-332362-00	
HRS	SPECIFICATION SHEET		PART NO.	FH48-**S-0.5SV		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL580	△	1/2

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SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CORROSION SALT MIST	EXPOSED AT 35±2°C , 5 % SALT WATER SPRAY FOR 96 h.	① CONTACT RESISTANCE: 100 mΩ MAX. ② NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
SURPHUR DIOXIDE [JIS C 0090]	EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% ,25±5 PPM FOR 96 h.		×	—
HYDROGEN SULPHIDE [JIS C 0092]	EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% ,10 ~ 15 PPM FOR 96 h.		×	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, ±5 °C FOR IMMERSION DURATION, 2±0.5 sec.	245 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±10°C FOR 5±1 sec .	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	×	—

(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.

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