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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.		
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
	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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HRS	SPECIFICATION SHEET		PART NO.	FH48-**S-0. 5SV	
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