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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 125 °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	APPLICABLE CABLE	t=0.3±0.05mm, GOLD PLATING HEAT RESISTANCE:125°C	
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					
CONTACT RESISTANCE	AC 20 mV MAX ( 1 KHz ) , 1 mA .		50 mΩ MAX. INCLUDING FPC,FPC BULK RESISTANCE (L=8mm)	x	x
INSULATION RESISTANCE	100 V DC.		500 MΩ MIN.	x	x
VOLTAGE PROOF	150 V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.	x	x
MECHANICAL CHARACTERISTICS					
MECHANICAL OPERATION	20 TIMES INSERTIONS AND EXTRACTIONS.		① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x	-
VIBRATION	FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, - m/s <sup>2</sup> FOR 10 CYCLES IN 3 AXIAL DIRECTIONS.		① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 50 mΩ MAX.	x	-
SHOCK	981 m/s <sup>2</sup> , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 BOTH AXIAL DIRECTIONS.		③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x	-
FPC RETENTION FORCE	MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.30mm AT INITIAL CONDITION.)		DIRECTION OF INSERTION: 0.4N × n MIN. (n:NUMBER OF CONTACTS) (note 1)	x	-
ENVIRONMENTAL CHARACTERISTICS					
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -40→+15T <sub>0</sub> +35→+125→+15T <sub>0</sub> +35°C TIME 30→ 2T <sub>0</sub> 3 → 30 → 2T <sub>0</sub> 3 min UNDER 1000 CYCLES.		① CONTACT RESISTANCE: 50 mΩ MAX. ② INSULATION RESISTANCE: 50 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x	-
DAMP HEAT (STEADY STATE)	EXPOSED AT 60±2°C, RELATIVE HUMIDITY 90 TO 95 %, 1000 h.			x	-
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.	x	-
DRY HEAT	EXPOSED AT 125±2 °C, 1000 h.		① CONTACT RESISTANCE: 50 mΩ MAX.	x	-
COLD	EXPOSED AT -40±3 °C, 1000 h.		② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	x	-
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.	x	-
SULPHUR DIOXIDE [JIS C 60068-2-42]	EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% ,25±5 ppm FOR 96 h.			x	-
HYDROGEN SULPHIDE [JIS C 60068-2-43]	EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% ,10 TO 15 ppm FOR 96 h.			x	-
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
					
REMARK			APPROVED	YN. TAKASHITA	17.11.10
			CHECKED	SJ. OKAMURA	17.11.09
			DESIGNED	SG. MASAKI	17.11.09
Unless otherwise specified, refer to IEC 60512.			DRAWN	KY. KIKUCHI	17.11.09
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-380099-00-00
	SPECIFICATION SHEET		PART NO.	FH28K-*S-0. 5SH	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL586	 1/2


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## SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING (MAX 2 CYCLES) PEAK TMP. 250 °C MAX . REFLOW TMP. OVER 230 °C WITHIN 60 sec. PRE-HEAT 150 TO 200°C FOR 90 TO 120 sec. 2) SOLDERING IRONS : TMP. 350±10°C FOR 5±1 sec .	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	x	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 245±3 °C FOR IMMERSION DURATION, 3±0.3 sec.	A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed.	x	—

**(note 1)**

THERE'S A CASE WHICH FPC/FFC RETENTION FORCE DOESN'T FULFILL THE VALUE,  
BECAUSE FPC/FFC SPECIFICATION AFFECTS THE RESULT OF FPC/FFC RETENTION FORCE.

Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.		ELC-380099-00-00	
<b>HRS</b>	SPECIFICATION SHEET		PART NO.	FH28K-*S-0.5SH	
	HIROSE ELECTRIC CO., LTD.		CODE NO	CL586	 2/2