

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

APPLICABLE STANDARD		-40 °C TO 85 °C		STORAGE TEMPERATURE RANGE	-10 °C TO 50 °C (PACKED CONDITION)
RATING	OPERATING TEMPERATURE RANGE			OPERATING OR STORAGE HUMIDITY RANGE	RELATIVE HUMIDITY 90 % MAX.(NOT DEWED)
	VOLTAGE	50 V AC / DC		APPLICABLE CABLE	±0.3±0.05mm, GOLD PLATING
CURRENT	0.5 A (note)				
SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS		QT	AT
CONSTRUCTION		VISUALLY AND BY MEASURING INSTRUMENT. ACCORDING TO DRAWING.			
GENERAL EXAMINATION	CONFIRMED VISUALLY.				
ELECTRIC 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 ² FOR 10 CYCLES IN 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF μs. ② CONTACT RESISTANCE: 50 mΩ MAX. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		X	—
SHOCK	981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 DIRECTIONS.	DIRECTION OF INSERTION: 0.4N x n MIN. (n: NUMBER OF CONTACTS)		X	—
FPC RETENSION FORCE	MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE ±0.30mm AT INITIAL CONDITION.)			X	—
ENVIRONMENTAL CHARACTERISTICS					
RAPID CHANGE OF TEMPERATURE	TEMPERATURE-40→+15to+35→+85→+15to+35°C TIME 30→ 2~3 → 30→ 2~3 min UNDER 5 CYCLES.	① CONTACT RESISTANCE: 50 mΩ MAX. ② INSULATION RESISTANCE: 50 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		X	—
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2°C, RELATIVE HUMIDITY 90 TO 95 %, 96 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	—
DAMP HEAT, CYCLIC	EXPOSED AT -10 TO +65 °C, RELATIVE HUMIDITY 90 TO 96 %, 10 CYCLES, TOTAL 240 h.			X	—
DRY HEAT	EXPOSED AT 85±2 °C, 96 h.	① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		X	—
COLD	EXPOSED AT -40±3°C, 96 h.			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	—
SURPHUR DIOXIDE	EXPOSED AT 40±2 °C, RELATIVE HUMIDITY 80±5%, 25±5 PPM FOR 96 h.			X	—
HYDROGEN SULPHIDE	EXPOSED AT 40±2 °C, RELATIVE HUMIDITY 80±5%, 10 ~ 15 PPM FOR 96 h.			X	—
Q	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
REMARK	UNLESS OTHERWISE SPECIFIED, REFER TO JIS C 5402.				
Note	QT:Qualification Test AT:Assurance Test X:Applicable Test	DRAWING NO.	ELC4-155139-01		
HRS	SPECIFICATION SHEET	PART NO.	FH28E-40S-0.5SH (07)		
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL586-1814-4-07		
					1/2

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING (MAX 2 CYCLES) PEAK TMP. 250 °C MAX. REFLOW TMP. 230 °C MIN FOR 60 sec. PRE-HEAT 150~200°C FOR 90~120 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: ±5 °C FOR IMMERSION DURATION, 2±0.5 sec.	235 A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	X	—

(note)

WHEN THE SAME VALUE OF CURRENT ARE APPLIED TO ALL CONTACTS AT THE SAME TIME IN ONCE,
SET THE CURRENT TO THE 70 % OF THE RATED CURRENT VALUE.

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	HIROSE ELECTRIC CO., LTD.	PART NO.	CODE NO	GL586-1814-4-07
		FH28E-40S-0.5SH (07)		2/2