



APPLICABLE STANDARD		OPERATING TEMPERATURE RANGE		STORAGE TEMPERATURE RANGE		-10 °C TO 50 °C (PACKED CONDITION)		
RATING	VOLTAGE	50 V AC / DC	°C	OPERATING OR STORAGE HUMIDITY RANGE	RELATIVE HUMIDITY 90 % MAX (NOT DEWED)			
	CURRENT	0.5 A		APPLICABLE CABLE	±0.3 ± 0.05mm, GOLD PLATING (4~30 POS.) ±0.3 ± 0.03mm, GOLD PLATING (OVER 31 POS.)			
SPECIFICATIONS								
ITEM	TEST METHOD			REQUIREMENTS				
CONSTRUCTION				GENERAL EXAMINATION VISUALLY AND BY MEASURING INSTRUMENT.				ACCORDING TO DRAWING.
MARKING				CONFIRMED VISUALLY.				
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.		50 mΩ MAX. INCLUDING FPC, FPC 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 μs.		X	—	
SHOCK		981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 DIRECTIONS.		② CONTACT RESISTANCE: 50 mΩ MAX. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		X	—	
MECHANICAL OPERATION		20 TIMES INSERTIONS AND EXTRACTIONS.		① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		X	—	
FPC RETENSION FORCE		MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE ±0.30mm AT INITIAL CONDITION.)		DIRECTION OF INSERTION : 0.3N x n MIN.(4~30 POS.) 0.2N x n MIN.(OVER 31 POS.) (note 1)		X	—	
ENVIRONMENTAL CHARACTERISTICS								
CORROSION SALT MIST		EXPOSED AT 35±2 °C, 5 % SALT WATER SPRAY FOR 96 h.		① CONTACT RESISTANCE: 100 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. ③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.		X	—	
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -55 → +15 to +35 → +85 → +15 to +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.		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	—	
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.		ELC4-156169-02		
		SPECIFICATION SHEET		PART NO.		FH33-**-S-0.5SH (10)		
		HIROSE ELECTRIC CO., LTD.		CODE NO.		CL580		
						 1/2		

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

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
DRY HEAT	EXPOSED AT 85±2 °C, 96 h.	① CONTACT RESISTANCE: 50 mΩ MAX.	X	—
COLD	EXPOSED AT -55±3°C, 96 h.	② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
SURPHUR DIOXIDE [JIS C 0090]	EXPOSED AT 40±2 °C, RELATIVE HUMIDITY ±5% 25±5 PPM FOR 96 h.	① CONTACT RESISTANCE: 100 mΩ MAX. OF PARTS. ② NO DAMAGE, CRACK AND LOOSENESS	X	—
HYDROGEN SULPHIDE [JIS C 0092]	EXPOSED AT 40±2 °C, RELATIVE HUMIDITY 80±5%, 10 TO 15 PPM FOR 96 h.	③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.	X	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 235 ±5°C FOR IMMERSION DURATION, 2±0.5 sec.	A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	X	—
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.	X	—

(notes)

THIS PRODUCT HAS FLIP-LOCK CONSTRUCTION. FASTEN FPC ON PCB OR SOMETHING FIXED IF FORCE IN VERTICAL DIRECTION SHALL BE PREDICTED.

Note Q1:Qualification Test AT:Assurance Test X:Applicable Test DRAWING NO. ELG4-156169-02

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	HIROSE ELECTRIC CO., LTD.	CODE NO	CL580