

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

APPLICABLE STANDARD		TEST METHOD		REQUIREMENTS		QT	AT
OPERATING TEMPERATURE RANGE	-55 °C TO 85 °C	STORAGE TEMPERATURE RANGE	-10°C TO 50 °C (PACKED CONDITION)			X	X
VOLTAGE	50 V AC / DC	OPERATING OR STORAGE HUMIDITY RANGE	RELATIVE HUMIDITY 90 % MAX (NOT DEWED)			X	X
CURRENT	0.5 A	APPLICABLE CABLE	±0.3±0.05mm, GOLD PLATING				
<b>SPECIFICATIONS</b>							
ITEM	TEST METHOD		REQUIREMENTS		QT	AT	
<b>CONSTRUCTION</b>				GENERAL EXAMINATION VISUALLY AND BY MEASURING INSTRUMENT. ACCORDING TO DRAWING.			
MARKING				CONFIRMED VISUALLY.			
<b>ELECTRIC CHARACTERISTICS</b>							
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	
<b>MECHANICAL CHARACTERISTICS</b>							
VIBRATION	FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, — m/s <sup>2</sup> FOR 10 CYCLES IN 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 1 μs.		X		—	
SHOCK	981 m/s <sup>2</sup> , 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 RETENTION FORCE	MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE ±0.30mm AT INITIAL CONDITION.)	DIRECTION OF INSERTION : 1.8N MIN. (note 1)		X		—	
<b>ENVIRONMENTAL CHARACTERISTICS</b>							
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→+15to+35→+85→+15to+35°C TIME 30→ 2to 3 → 30→ 2to 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.		ELC4-322795-01		
	APPROVED		R.I. TAKAYASU		10.03.05		
	CHECKED		HS. SAKAMOTO		10.03.04		
DESIGNED		YH. KOTANI		10.03.04			
DRAWN		MK. YASUMI		10.03.04			
<b>HS SPECIFICATION SHEET</b>							
HIROSE ELECTRIC CO., LTD.		PART NO.	FH33J-12 (6) SB-1SH (10)		CODE NO.	QL580-1326-2-10	
				ELC4-322795-01			
				10.03.04			

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### SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
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 -55±3°C, 96 h.	② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
SURPHUR DIOXIDE	EXPOSED AT 40±2 °C, RELATIVE HUMIDITY [JIS C 0090J] 80±5%, 25±5 PPM FOR 96 h.	① CONTACT RESISTANCE: 100 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
HYDROGEN SULPHIDE	EXPOSED AT 40±2 °C, RELATIVE HUMIDITY [JIS C 0092J] 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 IMMERSERD.	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.

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<b>HRS</b>	SPECIFICATION SHEET		PART NO.	FH33J-12 (6) SB-1SH (10)	
	HIROSE ELECTRIC CO., LTD.		CODE NO	CL580-1326-2-10	△