

APPLICABLE STANDARD		SPECIFICATIONS			
RATING	OPERATING TEMPERATURE RANGE	-40 °C TO 105 °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 1)	APPLICABLE CABLE	t=0.3±0.05mm, GOLD PLATING	
CONSTRUCTION					
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.		ACCORDING TO DRAWING.		<input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X
MARKING	CONFIRMED VISUALLY.				<input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X
ELECTRICAL CHARACTERISTICS					
CONTACT RESISTANCE	1mA(DC OR 1000Hz).		50 mΩ MAX. INCLUDING FPC,FFC BULK RESISTANCE (L=8mm)		<input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X
INSULATION RESISTANCE	100 V DC.		500 MΩ MIN.		<input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X
VOLTAGE PROOF	150 V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.		<input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X
MECHANICAL CHARACTERISTICS					
MECHANICAL OPERATION	20 TIMES INSERTIONS AND EXTRACTIONS.		① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		<input checked="" type="checkbox"/> X <input type="checkbox"/> —
VIBRATION	FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, FOR 10 CYCLES IN 3 AXIAL DIRECTIONS.		① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 50 mΩ MAX.		<input checked="" type="checkbox"/> X <input type="checkbox"/> —
SHOCK	981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 BOTH AXIAL DIRECTIONS.		③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		<input checked="" type="checkbox"/> X <input type="checkbox"/> —
FPC RETENTION FORCE	MEASURED BY APPLICABLE FPC. (CONNECTOR,FPC AT INITIAL CONDITION. THICKNESS OF FPC SHALL BE t=0.30mm)		DIRECTION OF INSERTION: 0.4xn N MIN (n : NUMBER OF CONTACTS).		<input checked="" type="checkbox"/> X <input type="checkbox"/> —
ENVIRONMENTAL CHARACTERISTICS					
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -40 → +15 → +35 → +105 → +15 → +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.		<input checked="" type="checkbox"/> X <input type="checkbox"/> —
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2 °C, RELATIVE HUMIDITY 90 TO 95 %, 96 h.				<input checked="" type="checkbox"/> X <input type="checkbox"/> —
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.		<input checked="" type="checkbox"/> X <input type="checkbox"/> —
DRY HEAT	EXPOSED AT 105±2 °C, 96 h.		① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.		<input checked="" type="checkbox"/> X <input type="checkbox"/> —
COLD	EXPOSED AT -40±3°C, 96 h.				<input checked="" type="checkbox"/> X <input type="checkbox"/> —
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.		<input checked="" type="checkbox"/> X <input type="checkbox"/> —
SULPHUR DIOXIDE [JIS C 60068-2-42]	EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% , 25±5 ppm FOR 96 h.				<input checked="" type="checkbox"/> X <input type="checkbox"/> —
HYDROGEN SULPHIDE [JIS C 60068-2-43]	EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% , 10 TO 15 ppm FOR 96 h.				<input checked="" type="checkbox"/> X <input type="checkbox"/> —
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
					
REMARK			APPROVED	NF. MIYAZAKI	16. 04. 21
			CHECKED	HS. SAKAMOTO	16. 04. 21
			DESIGNED	HK. KINOUCHI	16. 04. 21
Unless otherwise specified, refer to IEC 60512.			DRAWN	RN. IIDA	16. 02. 22
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-347552-99-00
	SPECIFICATION SHEET		PART NO.	FH52E-**S-0.5SH(99)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL580	 1/2

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING (TO BE 2 TIMES MAX) PEAK TMP. 250 °C MAX REFLOW TMP. OVER 230 °C WITHIN 60 sec. PRE-HEATING. 150 TO 200°C 90 TO 120 sec. 2) SOLDERING IRONS : 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)

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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HS	SPECIFICATION SHEET	PART NO.	FH52E-**S-0. 5SH (99)	
	HIROSE ELECTRIC CO., LTD.	CODE NO	CL580	△ 2/2