

COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	
△					△					
△					△					
APPLICABLE STANDARD										
RATING	OPERATING TEMPERATURE RANGE	-40 °C TO 85 °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±0.05 , GOLD PLATED				
SPECIFICATIONS										
ITEM	TEST METHOD				REQUIREMENTS				QT	AT
CONSTRUCTION										
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.				ACCORDING TO DRAWING.				×	×
MARKING	CONFIRMED VISUALLY.								×	×
ELECTRIC CHARACTERISTICS										
CONTACT RESISTANCE	1 mA (DC OR 1000 Hz).				50 mΩ MAX. INCLUDING FPC, FFC BULK RESISTANCE (L=8mm)				×	×
INSULATION RESISTANCE	100 V DC.				500 MΩ MIN.				×	×
VOLTAGE PROOF	150 V AC FOR 1 min.				NO FLASHOVER OR BREAKDOWN.				×	×
MECHANICAL CHARACTERISTICS										
MECHANICAL OPERATION	20 TIMES INSERTIONS AND EXTRACTIONS.				① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.				×	—
VIBRATION	FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, FOR 10 CYCLES IN 3 DIRECTIONS.				① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 50 mΩ MAX.				×	—
SHOCK	981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 DIRECTIONS.				③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.				×	—
FPC RETENSION FORCE	MEASURED BY APPLICABLE FPC. (CONNECTOR, FPC AT INITIAL CONDITION. THICKNESS OF FPC SHALL BE t=0.30mm)				DIRECTION OF INSERTION : 0.4 × n N MIN. (n : NUMBER OF CONTACTS)				×	—
ENVIRONMENTAL CHARACTERISTICS										
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -40 → +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.				×	—
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2 °C, RELATIVE HUMIDITY 90 TO 95 %, 96 h.								×	—
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.				×	—
DRY HEAT	EXPOSED AT 85±2 °C, 96 h.				① CONTACT RESISTANCE: 50 mΩ MAX.				×	—
COLD	EXPOSED AT -40±3 °C, 96 h.				② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.				×	—
EMARKS					DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED	
					D.YAMADA 04.06.10	T.MURAI 04.06.10	T. Kuwata 104.06.11	R. Takayama 04.06.14		
Unless otherwise specified, refer to JIS C 5402.										
Note QT:Qualification Test AT:Assurance Test ×:Applicable Test										
HRS HIROSE ELECTRIC CO., LTD.					SPECIFICATION SHEET					
					PART NO. FH12 - * (*) SA - 1SH (55)					
CODE NO.(OLD)			DRAWING NO.			CODE NO.			1 2	
CL			ELC4 - 150545 - 51			CL 586			(FH)	

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
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.	×	—
SURPHUR DIOXIDE [JIS C 0090]	EXPOSED AT 40±2 °C, RELATIVE HUMIDITY 80±5 %, 25±5 PPM FOR 96 h.		×	—
HYDROGEN SULPHIDE [JIS C 0092]	EXPOSED AT 40±2 °C, RELATIVE HUMIDITY 80±5 %, 10 TO 15 PPM FOR 96 h.		×	—
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING (TO BE 2 TIMES MAX.) PEAK TMP. 250 °C MAX. REFLOW TMP. 230 °C MIN. FOR 30 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.	×	—
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.	×	—

※ 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.

REMARKS	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
Unless otherwise specified, refer to JIS C 5402.	D.YAMADA	T.MURAI	<i>T. Kuwata</i>	<i>R. Takayama</i>	
	04.06.10	04.06.10	04.06.11	04.06.14	

Note QT:Qualification Test AT:Assurance Test ×:Applicable Test

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