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

COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
△	1	DIS-F-000029	H.T	S.W	05.03.28	△			
△					△				
<b>APPLICABLE STANDARD</b>									
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 (note)			APPLICABLE CABLE	t=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>									
CONTACT RESISTANCE		AC 20 mV MAX ( 1 KHz ), 1 mA .			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.			×	×
<b>MECHANICAL CHARACTERISTICS</b>									
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, - m/s <sup>2</sup> FOR 10 CYCLES IN 3 DIRECTIONS.			① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 50 mΩ MAX.			×	—
SHOCK		981 m/s <sup>2</sup> , 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. (THICKNESS OF FPC SHALL BE t=0.30mm AT INITIAL CONDITION.)			DIRECTION OF INSERTION : 0.4×n N MIN. (n:NUMBER OF CONTACTS)			×	—
<b>ENVIRONMENTAL CHARACTERISTICS</b>									
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -40→+15 TO +35→+85→+15 TO +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.			×	—
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.			×	—
REMARKS					DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
					K. FURUKAWA	H. TSUKUMO	S. WATANABE	R. TAKAYASU	
					04. 11. 06	04. 11. 07	04. 11. 09	04. 11. 09	
Unless otherwise specified, refer to JIS C 5402.									
Note QT:Qualification Test AT:Assurance Test X:Applicable Test									
<b>HRS</b> HIROSE ELECTRIC CO., LTD.				SPECIFICATION SHEET			PART NO. FH28 - 55S - 0.5SH(05)		
CODE NO.(OLD)		DRAWING NO.			CODE NO.			1 2	
CL		ELC4 - 153990 - 01			CL 586 - 1800 - 0 - 05				

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SPECIFICATIONS						
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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 ~ 15 PPM FOR 96 h.		×	—		
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.	×	—		
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.	×	—		
<p><b>(note)</b></p> <p>WHEN THE SAME VALUE OF CURRENT ARE APPLID TO ALL CONTACTS AT THE SAME TIME IN ONCE, SET THE CURRENT TO THE 70 % OF THE RATED CURRENT VALUE.</p>						
REMARKS		DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
Unless otherwise specified, refer to JIS C 5402.		K. FURUKAWA 04. 11. 06	H. TSUKUMO 04. 11. 07	S. WATANABE 04. 11. 09	R. TAKAYASU 04. 11. 09	
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