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

APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-35 °C TO +85°C (NOTE1)	STORAGE TEMPERATURE RANGE	-10 °C TO +60°C (NOTE3)	
	OPERATING HUMIDITY RANGE	20% TO 80% (NOTE2)	STORAGE HUMIDITY RANGE	40% TO 70% (NOTE3)	
	APPLICABLE CONNECTOR	DF57H-3S-1.2C(##)	CURRENT	AWG 28 : 2.0A AWG 30 : 1.5A	
	VOLTAGE	100 V AC/DC		AWG 32 : 1.0A AWG 34 : 0.8A	
SPECIFICATIONS					
ITEM	TEST METHOD		REQUIREMENTS	QT	AT
CONSTRUCTION					
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.		ACCORDING TO DRAWING.	X	X
MARKING	CONFIRMED VISUALLY.			X	X
ELECTRIC CHARACTERISTICS					
CONTACT RESISTANCE MILLIVOLT LEVEL METHOD	20mV MAX, 1mA (DC or 1000Hz).		10 mΩ MAX.	X	-
INSULATION RESISTANCE	100 V DC.		100 MΩ MIN.	X	-
VOLTAGE PROOF	500 V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.	X	-
MECHANICAL CHARACTERISTICS					
MECHANICAL OPERATION	30 TIMES INSERTION AND EXTRACTION.		①CONTACT RESISTANCE: 20 mΩ MAX. ②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	-
CONTACT INSERTION AND EXTRACTION FORCES	IT TAKES OUT AND INSERTS WITH A CONFORMITY CONNECTOR.		①INSERTION FORCE : 20.0N MAX. ②EXTRACTION FORCE: 0.9N MIN.	X	-
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 10 CYCLES FOR 3 DIRECTION.		①NO ELECTRICAL DISCONTINUITY OF 1 μs. ②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	-
SHOCK	ACCELERATION OF 490 m/s ² , 11ms DURATION ,SINE HALF-WAVE, 3 CYCLES IN EACH OF THE 3 AXIS.			X	-
ENVIRONMENTAL CHARACTERISTICS					
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 ± 2°C , 90 TO 95 %, 96 h. (AFTER LEAVING THE ROOM TEMPERATURE FOR 1~2h.)		①CONTACT RESISTANCE: 20 mΩ MAX. ②INSULATION RESISTANCE: 100 MΩ MIN. ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	-
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55°C→ +85°C TIME 30min→ 30min UNDER 5 CYCLES. (THE TRANSFERRING TIME OF THE TANK IS 2~3 min) (AFTER LEAVING THE ROOM TEMPERATURE FOR 1~2h.)		①CONTACT RESISTANCE: 20 mΩ MAX. ②INSULATION RESISTANCE: 100 MΩ MIN. ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	-
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING «REFLOW TIME» NUMBER OF REFLOW CYCLES : 2 CYCLES MAX. DURATION ABOVE 220 °C, 60 sec. MAX. PEAK TEMPERATURE: 250°C 10 sec. MAX. «PRE-HEAT TIME» PRE-HEAT TEMPERATURE (MIN) :150 °C PRE-HEAT TEMPERATURE (MAX) :180 °C PRE-HEAT TIME (MIN) : 90 sec. PRE-HEAT TIME (MAX) : 120 sec. 2) MANUAL SOLDERING SOLDERING IRON TEMPERATURE :350±10°C, SOLDERING TIME : 3sec. NO STRENGTH ON CONTACT.		NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	-
SOLDERABILITY	SOLDERING TEMPERATURE : 245°C DURATION OF IMMERSION :SOLDERING, FOR 5 sec.		NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95 % OF THE SURFACE BEING IMMERSSED.	X	-
NOTE 1: INCLUDE THE TEMPERATURE RISING BY CURRENT. NOTE2:NO CONDENSING NOTE3:APPLY TO THE CONDITION OF LONG TERM STORAGE FOR UNUSED PRODUCTS BEFOR PCB ON BOARD, AFTER PCB BOARD , OPERATING TEMPERATURE AND HUMIDITTY RANGE IS APPLIED FOR INTERIM STRAGE DURING TRANSPORTATION.					
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△					
REMARKS			APPROVED	HK. UMEHARA	13. 04. 12
			CHECKED	HK. UMEHARA	13. 04. 12
Unless otherwise specified, refer to JIS C 5402.			DESIGNED	TS. KUMAZAWA	13. 04. 12
			DRAWN	MI. SAKIMURA	13. 04. 12
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-344680-01
HRS	SPECIFICATION SHEET		PART NO.	DF57H-2P-2. 4V (21)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL666-0109-0-21	△ 1/1