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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(##)	UL・C-UL RATING △2	OPERATING TEMPERATURE RANGE	-35 °C TO +75°C (NOTE1)
	APPLICABLE CONTACT	DF57-****SCF(##)		VOLTAGE	29 V AC/DC
	VOLTAGE	50 V AC/DC		CURRENT	AWG28 : 2.0A/PIN AWG30 : 1.5A/PIN AWG32 : 1.2A/PIN AWG34 : 1.0A/PIN
	CURRENT	AWG28 : 2.0A/PIN AWG30 : 1.5A/PIN AWG32 : 1.0A/PIN AWG34 : 0.8A/PIN			

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.	1)CONTACT RESISTANCE: 20 mΩ MAX. 2)NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	–
CONTACT INSERTION AND EXTRACTION FORCES	IT TAKES OUT AND INSERTS WITH A CONFORMITY CONNECTOR.	1)INSERTION FORCE : 20.0N MAX. 2)EXTRACTION FORCE: 0.9N MIN.	X	–
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 10 CYCLES FOR 3 DIRECTION.	1)NO ELECTRICAL DISCONTINUITY OF 1 μs. 2)NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	–
SHOCK	490 m/s^2 DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.		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.)	1)CONTACT RESISTANCE: 20 mΩ MAX. 2)INSULATION RESISTANCE: 100 MΩ MIN. 3)NO 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.)	1)CONTACT RESISTANCE: 20 mΩ MAX. 2)INSULATION RESISTANCE: 100 MΩ MIN. 3)NO 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℃ 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 IMMERSED.	X	–

NOTE1:INCLUDE THE TEMPERATURE RISING BY CURRENT.
NOTE2:NO CONDENSING.
NOTE3:APPLY TO THE CONDITION OF LONG TERM STORAGE FOR UNUSED PRODUCTS BEFORE MOUNTED ON PCB. AFTER MOUNTED ON PCB, OPERATION TEMPERATURE AND HUMIDITY RANGE IS APPLIED FOR INTERIM STORAGE DURING TRANSPORTATION.

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△2	1	DIS-H-00005763	HK. HAYASHI	SZ. ONO	20200220

REMARKS			
	APPROVED	KI. AKIYAMA	20120221
	CHECKED	HK. UMEHARA	20120221
	DESIGNED	TS. KUMAZAWA	20120220
Unless otherwise specified, refer to IEC 60512.	DRAWN	TS. KUMAZAWA	20120220

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

DRAWING NO. ELC-343905-21-01

HRS	SPECIFICATION SHEET	PART NO.	DF57H-3P-1.2V(21)		
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL666-0105-0-21	△2	1/1

FORM HD0011-2-1