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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	△1 -55°C TO 85°C(NOTE 1)	STORAGE TEMPERATURE RANGE	-10°C TO 60°C
	VOLTAGE	△1 50V AC	APPLICABLE CONNECTOR	DF40C-90DP-0.4V(**)
	CURRENT	0.3A		

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	20mV AC OR LESS 1kHz,1mA .	90mΩ MAX.	X	—
INSULATION RESISTANCE	100V DC.	50MΩ MIN.	X	—
VOLTAGE PROOF	150V AC FOR 1 min. △1	NO FLASHOVER OR BREAKDOWN.	X	—
MECHANICAL CHARACTERISTICS				
MECHANICAL OPERATION	30TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: 90mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
VIBRATION	FREQUENCY 10 TO 55 TO 10 Hz,APPROX 5min, SINGLE AMPLITUDE 0.75 mm,10CYCLES, FOR 3 DIRECTIONS.	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.	① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
ENVIRONMENTAL CHARACTERISTICS				
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55→ 5 TO 35→85→ 5 TO 35 °C TIME 30→ 5 MAX → 30→ 5 MAX min UNDER 5 CYCLES.	① CONTACT RESISTANCE: 90mΩ MAX. ② INSULATION RESISTANCE: 50MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.	① CONTACT RESISTANCE: 90mΩ MAX. ② INSULATION RESISTANCE: 25MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
SULPHUR DIIOXIDE	EXPOSED IN 25 PPM FOR 96h,25℃,75%.	① CONTACT RESISTANCE: 180mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
HEAT RESISTANCE OF SOLDERING	**RECOMMENDED TEMPERATURE PROFILE** **SOLDERING AREA** MAX 250℃, 220℃ FOR 60 SECONDS MAX. **PREHEATING AREA** 150 TO 180℃ 90 TO 120SECONDS. MAXIMUM TWICE ACTION IS ALLOWED UNDER THE SAME CONDITION. **RECOMMENDED MANUAL SOLDERING CONDITION** SOLDERING IRON TEMPERATURE 350℃. SOLDERING TIME: WIHTIN 3 SECONDS.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINASL.	X	—
SOLDERABILITY	SOLDERING TEMPERATURE: 245±5℃ DURATION OF IMMERSION: SOLDERING FOR 3 SECONDS.	A NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95% OF THE SURFACE BEING IMMERSED.	X	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△1	3	DIS-H-00019849	RT. SHIMIZU	TY. OOI	20240228

REMARKS
NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT

Unless otherwise specified, refer to JIS C 5402, IEC 60512.

APPROVED	KH. IKEDA	20140311
CHECKED	TS. MIYAZAKI	20140311
DESIGNED	RT. SHIMIZU	20140311
DRAWN	TH. YASUI	20140310

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

DRAWING NO. ELC4-337746-01

HRS	SPECIFICATION SHEET	PART NO.	DF40HC(3.0)-90DS-0.4V(51)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL0684-4161-4-51 △1	1/1

FORM HD0011-2-1