

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

APPLICABLE STANDARD		STORAGE TEMPERATURE RANGE		-10°C T0 +60°C (NOTE3)	
OPERATING TEMPERATURE RANGE	-35°C T0 +85°C (NOTES 1)	STORAGE TEMPERATURE RANGE			
OPERATING HUMIDITY RANGE	20 % T0 80 % (NOTES 2)	STORAGE HUMIDITY RANGE		40 % T0 70 % (NOTE3)	
VOLTAGE	150 V AC (DC)	CURRENT		1 A	
APPLICABLE CONNECTOR	DF13-*S-1.25C	APPLICABLE CONTACT		DF13(G)-2630SCF DF13-3032SCF	

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
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CONSTRUCTION				
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GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	X	X
MARKING	CONFIRMED VISUALLY.		X	X

ELECTRIC CHARACTERISTICS				
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CONTACT RESISTANCE	100 m A (DC OR 1000 Hz).	30 mΩ MAX.	X	-
INSULATION RESISTANCE	100 V DC.	500 MΩ MIN.	X	-
VOLTAGE PROOF	500 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	-

MECHANICAL CHARACTERISTICS				
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MECHANICAL OPERATION	30 TIMES INSERTIONS AND EXTRactions.	① CONTACT RESISTANCE: 30 mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	-
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 1μs. 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				
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RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55→ 15 TO 35→+85→ 15 TO 35 °C TIME 30→ 2 TO 3→30→ 2 TO 3 min. UNDER 5 CYCLES.	① CONTACT RESISTANCE: 30mΩ MAX. ② INSULATION RESISTANCE: 500 MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	-
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.		X	-

RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING «REFLOW AREA» 250°C MAX 10 sec MAX 230°C MIN 60 sec MAX «PREHEATING AREA» 170°C TO 190°C 60 sec TO 120 sec PUT THROUGH IN REFLOW FURNACE TWICE, LEAVE IN AMBIENT TEMPERATURE AND HUMIDITY FOR 1 HOUR. 2) MANUAL SOLDERING SOLDERING IRON TEMPERATURE :350°C, SOLDERING TIME : 3sec. NO STRENGTH ON CONTACT.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	-
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 245°C FOR INSERTION DURATION, 3sec.	SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed.	X	-

REMARKS

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

Unless otherwise specified, refer to JIS C 5402.

COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE	
				APPROVED	DESIGNED
△				TS. SAKATA	09.11.04
				TS. FUKUSHIMA	09.11.04
				KT. ISHII	09.11.01
				KT. ISHII	09.11.01

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

DRAWING NO. ELG4-162444-06

HRS	SPECIFICATION SHEET	PART NO.	DF13A-*P-1.25H (21)
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL536