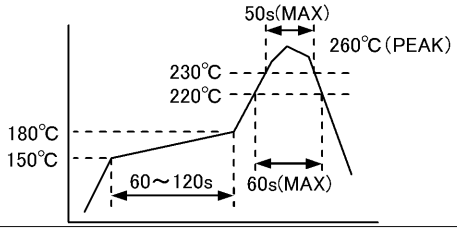
May.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

APPLICABLE STANDARD				
RATING	OPERATING TEMPERATURE RANGE	-55 °C TO 85 °C (1) (2)	STORAGE TEMPERATURE RANGE	-10 °C TO 60 °C (3)
	OPERATING HUMIDITY RANGE	RH 85 % MAX (2) (4)	STORAGE HUMIDITY RANGE	RH 70 % MAX (3) (4)
	VOLTAGE	60 V AC	CURRENT	0.5 A

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	×	×
MARKING	CONFIRMED VISUALLY.		×	×
ELECTRIC CHARACTERISTICS				
CONTACT RESISTANCE	20 mV MAX, 1 mA(DC OR 1000Hz)	80 mΩ MAX.(5)	×	
INSULATION RESISTANCE	100 V DC.	500 MΩ MIN.	×	
VOLTAGE PROOF	200 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	×	
MECHANICAL CHARACTERISTICS				
INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION FORCE: 10.5 N MAX. WITHDRAWAL FORCE: 1.05 N MIN.	×	
MECHANICAL OPERATION	50 TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: NO VARIATION OF 20 mΩ OR MORE FROM INITIAL VALUE. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGL AMPLITUDE : 0.75 mm, FOR 2 h IN 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	
SHOCK	490 m/s^2, DURATION OF PULSE 11 ms FOR 3 TIMES IN 3 DIRECTIONS.		×	
ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2 °C, 90 ～ 95 %, 96 h.	① CONTACT RESISTANCE: NO VARIATION OF 20 mΩ OR MORE FROM INITIAL VALUE. ② INSULATION RESISTANCE: 500 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	
DRY HEAT	EXPOSED AT 85±2 °C, 96 h			
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → +5～+35 → +85 → +5～+35 °C TIME 30 → 5 MAX → 30 → 5 MAX min. UNDER 5 CYCLES.		×	
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.	① CONTACT RESISTANCE: NO VARIATION OF 20 mΩ OR MORE FROM INITIAL VALUE. ② NO DERECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR.	×	
SULFUR DIOXIDE	EXPOSED IN 25 PPM FOR 96 h. (TEST STANDARD: JIS C 60068)		×	
RESISTANCE TO SOLDERING HEAT	1)REFLOW SOLDERING : REFLOW 2 TIMES UNDER THE TEMPERATURE PROFILE SHOWN BELOW.  	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.	×	
	2) SOLDERING IRONS : 360℃ MAX. FOR 5 sec.		×	
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE 240±3℃ FOR IMMERSION DURATION, 3 sec.	A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	×	

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
1	2	DIS-F-004353	KN. SHIBUYA	HT. YAMAGUCHI	09. 12. 15

1 REMARKS

(1) INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING.
(2) OPERATING TEMPERATURE SHOULD BE -55 TO 40℃ WHEN HUMIDITY EXCEEDS 80% RH.
(3) "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB.
(4) THERE MUST NOT BE DEWFALL.
(5) DON'T INCLUDE CONDUCTOR RESISTANCE OF THE CABLE OF THE COMBINATION CONNECTOR.

Unless otherwise specified, refer to JIS-C-5402.

APPROVED	HS. OKAWA	08. 06. 05
CHECKED	HT. YAMAGUCHI	08. 06. 05
DESIGNED	SS. YOSHIDA	08. 06. 04
DRAWN	SS. YOSHIDA	08. 06. 04

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

DRAWING NO. ELC4-157329-00

HRS	SPECIFICATION SHEET	PART NO.	FX16-21S-0.5SV	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL575-3401-1-00	1 1/1

FORM HD0011-2-1