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

	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE		COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
△						△					
△						△					

APPLICABLE STANDARD

RATING	Operating Temperature Range	-55℃ to +105℃ (Note1)	Storage Temperature Range	-10℃ to +60℃ (Note3)
	Operating Humidity Range	20% to 80% (Note2)	Storage Humidity Range	40% to 70% (Note3)
	Applicable Connector	DF51K#-30DP-2DSA/DS (###)	Voltage	250V AC/DC
	Applicable Contact	DF51K-22SC(A)/SCF(A) (###) DF51K-2428SC(A)/SCF(A) (###) DF51K-30SC(A)/SCF(A) (###)	Current	AWG 30: 0.5A AWG 28: 1A AWG 26: 1.5A AWG 22-24: 2A

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
General Examination	Visually and by measuring instrument.	According to drawing.	o	o
Marking	Confirmed visually.		o	o
ELECTRICAL CHARACTERISTICS				
Contact Resistance Millivolt Level Method	20mV MAX, 1mA (DC or 1000Hz).	30 mΩ MAX.	o	–
Insulation Resistance	500 V DC.	1,000 MΩ MIN.	o	–
Voltage Proof	650 V AC for 1 min.	No flashover or breakdown.	o	–
MECHANICAL CHARACTERISTICS				
Mechanical Operation (Sn Plating)	30 times insertion and extraction.	①Contact resistance: 30mΩ MAX ②No damage, crack or looseness of parts.	o	–
Mechanical Operation (Au Plating)	50 times insertion and extraction.	①Contact resistance: 30mΩ MAX ②No damage, crack or looseness of parts.	o	–
Mating and unmating Force (Sn Plating)	It takes out and inserts with a conformity connector.	①Insertion Force: 128.2N MAX ②Extraction Force: 7.7N MIN	o	–
Mating and unmating Force (Au Plating)	It takes out and inserts with a conformity connector.	①Insertion Force: 81.2N MAX ②Extraction Force: 7.5N MIN	o	–
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.	o	–
Shock	Acceleration 490 m/s^2 duration of pulse 11 ms at 3 times for 3 directions.		o	–
Contact extraction force	Pull out the cable after housing fixation.	11.8N MIN	o	–
ENVIRONMENTAL CHARACTERISTICS				
Damp Heat (Steady State)	Exposed at 40 ± 2 ℃ , humidity 90 to 95 %, 96 h. (After leaving the room temperature for 1 to 2h.)	①Contact resistance: 30 mΩ MAX. ②Insulation resistance: 500MΩ MIN. ③No damage, crack or looseness of parts.	o	–
Rapid Change of Temperature	Temperature -55 ℃ → +105 ℃ Time 30min → 30min Under 5 Cycles. (The transferring time of the tank is 2 to 3 MIN) (After leaving the room temperature for 1 to 2h.)	①Contact resistance: 30 mΩ MAX. ②Insulation resistance: 1,000MΩ MIN. ③No damage, crack or looseness of parts.	o	–
Dry Heat	Exposed at 105±2 ℃, 96h		o	–
Cold	Exposed at -55±3 ℃, 96h		o	–

Remarks
Note 1: Include the temperature rising by current.
Note 2: No condensing
Note 3: 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.

	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
Unless otherwise specified, refer to IEC 60512.	J.S CHOI 17.12.22	J.S CHOI 17.12.22	S.M.LIM 17.12.22	T.S KANG 17.12.22	ENG 20. 02. 13 DEPT

NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST O: APPLICABLE TEST

HIROSE KOREA CO.,LTD.	SPECIFICATION SHEET	PART NO. DF51K-30DS-2C (800)

CODE NO.(OLD)	DRAWING NO.	CODE NO.	
CL	ELC4-632490	CL 6652-0038-1-800	1/1

F-1-021(Rev.0)