






Jun.1.2020 Copyright 2020 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 125°C (NOTE 1)	STORAGE TEMPERATURE RANGE	-10°C TO 60°C	
	VOLTAGE	30V AC/DC	MATING CONNECTOR	DF40GK-44DS-0.4V (**)	
	CURRENT	0.35A			
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	100V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.	X	-
MECHANICAL CHARACTERISTICS					
INSERTION AND WITHDRAWAL FORCES	MEASURED BY MATING CONNECTOR.		INSERTION FORCE 42.0N MAX WITHDRAWAL FORCE 6.0N MIN	X	-
LOCKING FORCE	MEASURED BY MATING CONNECTOR.		30N MIN	X	-
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 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.		① NO ELECTRICAL DISCONTINUITY OF 1μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	-
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
					
REMARKS			APPROVED	WR. FUKUCHI	18.09.06
NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT			CHECKED	TS. MIYAZAKI	18.09.06
Unless otherwise specified, refer to JIS C 5402, IEC 60512.			DESIGNED	SJ. WADA	18.09.05
			DRAWN	RH. KAGAMI	18.09.05
Note	QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.	ELC-355294-51-04	
	SPECIFICATION SHEET		PART NO.	DF40GL-44DP-0.4V (51)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL684-4412-2-51	 1/2

SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
ENVIRONMENTAL CHARACTERISTICS					
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → 125°C TIME 30 → 30 min UNDER 1000 CYCLES.	① CONTACT RESISTANCE: 90mΩ MAX. ② INSULATION RESISTANCE: 50MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X		—
DRY HEAT	EXPOSED AT 125 °C, 1,000 h.	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 DIOXIDE	EXPOSED IN 25 PPM FOR 96h,25°C,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°C, 220°C FOR 60 SECONDS MAX. PREHEATING AREA 150 TO 180°C 90 TO 120SECONDS. MAXIMUM TWICE ACTION IS ALLOWED UNDER THE SAME CONDITION. RECOMMENDED MANUAL SOLDERING CONDITION SOLDERING IRON TEMPERATURE 350°C. SOLDERING TIME: WIHTIN 3 SECONDS.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X		—
SOLDERABILITY	SOLDERING TEMPERATURE: 245±5°C DURATION OF IMMERSION: SOLDERING FOR 3 ±0.5 SECONDS.	A NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95% OF THE SURFACE BEING IMMERSED.	X		—
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