



**THE DATASHEET OF  
DF19G-20S-1SD-GND**



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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
△					△				
△					△				
<b>APPLICABLE STANDARD</b>									
<b>RATING</b>	OPERATING TEMPERATURE RANGE	-35 °C TO +85 °C(NOTE1)			STORAGE TEMPERATURE RANGE	-10 °C TO +60 °C			
	VOLTAGE	100 V AC			APPLICABLE CONTACT	—			
	CURRENT	AWG40 : 0.3A			APPLICABLE CONNECTOR	DF19*-20P-1H			
					APPLICABLE CABLE	THIN COAXIAL CABLE			
<b>SPECIFICATIONS</b>									
<b>ITEM</b>		<b>TEST METHOD</b>			<b>REQUIREMENTS</b>			<b>QT</b>	<b>AT</b>
<b>CONSTRUCTION</b>									
GENERAL EXAMINATION		VISUALLY AND BY MEASURING INSTRUMENT.			ACCORDING TO DRAWING.			○	○
MARKING		CONFIRMED VISUALLY.						○	○
<b>ELECTRICAL CHARACTERISTICS</b>									
CONTACT RESISTANCE		100 mA (DC OR 1000 Hz).			30 mΩ MAX.			—	—
CONTACT RESISTANCE MILLIVOLT LEVEL METHOD		20 mV MAX, mA(DC OR 1000 Hz).						—	—
INSULATION RESISTANCE		100 V DC.			500 MΩ MIN.			—	—
VOLTAGE PROOF		300 V AC FOR 1 min.			NO FLASHOVER OR BREAKDOWN.			○	—
<b>MECHANICAL CHARACTERISTICS</b>									
CONTACT INSERTION AND EXTRACTION FORCES		0.2 ± 0.005 mm BY STEEL GAUGE.			INSERTION FORCE : 3.0 N MAX. EXTRACTION FORCE : 0.2 N MIN.			—	—
INSERTION AND WITHDRAWAL FORCES		MEASURED BY APPLICABLE CONNECTOR.			INSERTION FORCE N MAX. EXTRACTION FORCE N MIN.			—	—
MECHANICAL OPERATION		30 TIMES INSERTION AND EXTRACTION.			① CONTACT RESISTANCE: 30 mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.			—	—
VIBRATION		FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h FOR 3 DIRECTIONS.			① NO ELECTRICAL DISCONTINUITY OF 1 μs.			—	—
SHOCK		490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.			② CONTACT RESISTANCE: - mΩ MAX. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.			—	—
<b>ENVIRONMENTAL CHARACTERISTICS</b>									
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -55 → 5~35 → +85 → 5~35 °C TIME 30 → 2~3 → 30 → 2~3 min UNDER 5 CYCLES.			① CONTACT RESISTANCE: 30 mΩ MAX. ② INSULATION RESISTANCE: 500 MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.			—	—
DAMP HEAT(STEADY STATE)		EXPOSED AT 40 ± 2 °C, 90 ~95 %, 96 h.						—	—
CORROSION, SALT MIST		EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.			① CONTACT RESISTANCE: - mΩ MAX. ② NO HEAVY CORROSION.			—	—
HYDROGEN SULPHIDE		EXPOSED IN PPM FOR h. (TEST STANDARD: JEIDA-38)			① CONTACT RESISTANCE: mΩ MAX. ② NO HEAVY CORROSION.			—	—
SULPHUR DIOXIDE		EXPOSED IN 10 PPM FOR 96 h. (TEST STANDARD: JEIDA-39)			① CONTACT RESISTANCE: - mΩ MAX. ② NO HEAVY CORROSION.			—	—
RESISTANCE TO SOLDERING HEAT		SOLDER TEMPERATURE, 260 °C, FOR IMMERSION DURATION, 10 s.			NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.			—	—
SOLDERABILITY		SOLDERED AT SOLDER TEMPERATURE, 235 °C FOR IMMERSION DURATION, 2 s.			SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.			—	—
<b>REMARKS</b> NOTE 1: INCLUDE THE TEMPERATURE RISING BY CURRENT.					<b>DRAWN</b>	<b>DESIGNED</b>	<b>CHECKED</b>	<b>APPROVED</b>	<b>RELEASED</b>
					<i>J. Tashiro</i> '99.4.12	<i>J. Tashiro</i> '99.4.12	<i>J. One</i> '99.4.12	<i>K. Katayama</i> '99.4.12	
Unless otherwise specified, refer to MIL-STD-1344.									
Note QT:Qualification Test AT:Assurance Test ○:Applicable Test									
<b>HRS HIROSE ELECTRIC CO., LTD.</b>					<b>SPECIFICATION SHEET</b>			PART NO. <b>DF19G-20S-1SD-GND</b>	
CODE NO.(OLD) <b>CL</b>			DRAWING NO. <b>ELC4-162937</b>			PART NO. <b>CL 685-0027-6</b>			<b>1</b> <b>1</b>

TO

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