




APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-35°C TO +85°C (NOTE1)	STORAGE TEMPERATURE RANGE	-10°C TO +60°C (NOTE3)	
	OPERATING HUMIDITY RANGE	40% TO 80% (NOTE2)	STORAGE HUMIDITY TANGE	40% TO 70% (NOTE3)	
	VOLTAGE	100 V AC	APPLICABLE CONNECTOR	DF19 (G) -20S-1# (NOTE4)	
	CURRENT	AWG28: 1A AWG30: 0.9A AWG32: 0.8A			
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		100 m A (DC OR 1000 Hz).	30 mΩ MAX.	X	—
INSULATION RESISTANCE		100 V DC.	500 MΩ MIN.	X	—
VOLTAGE PROOF		300 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	—
MECHANICAL CHARACTERISTICS					
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 1 μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
SHOCK		490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.		X	—
ENVIRONMENTAL CHARACTERISTICS					
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -55→5 TO 35→+85 →5 TO 35 °C TIME 30→2 TO 3 → 30 →2 TO 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.	X	—
DAMP HEAT (STEADY STATE)		EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.		X	—
CORROSION, SALT MIST		EXPOSED IN 5 % SALT WATER SPRAY FOR 48h.	NO HEAVY CORROSION	X	—
SULPHUR DIOXIDE		EXPOSED IN 10 PPM FOR 96h. (TEST STANDARD: JEIDA-39)		X	—
RESISTANCE TO SOLDERING HEAT		(1) REFLOW SOLDERING «REFLOW AREA» MAX 250°C WITHIN 10 sec MIN 230°C WITHIN 60 sec «PREHEATING AREA» 170°C TO 190 °C 60sec TO 120sec PUT THROUGH IN REFLOW FUMACE TWICE. LEAVE IN AMBIENT TEMPERATURE AND HUMIDITY FOR 1 HOUR (2) MANUAL SOLDERING SOLDERING IRON TEMPERATURE 350±5 °C, FOR 5±1 sec NO STRENGTH ON CONTACT.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—
SOLDERABILITY		SOLDERING TEMPERATURE : 245°C DURATION OF IMMERSION : SOLDERING, FOR 5 sec	A NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	X	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
					
REMARKS			APPROVED	TS. SAKATA	08. 12. 25
NOTE1: INCLUDING THE TEMPERATURE RISE BY CURRENT.			CHECKED	TS. KUMAZAWA	08. 12. 25
NOTE2:NO CONDENSING			DESIGNED	SN. KOBAYASHI	08. 12. 16
NOTE3:APPLY TO THE CONDITION OF LONGTERM STORAGE FOR UNUSED PRODUCTS BEFORE PCB ON BOARD, AFTER PCB BOARD, OPERATING TEMPERATURE AND HUMIDITY RANGE IS APPLIED FOR INTERIM STORAGE DURING TRANSPORTATION.			DRAWN	SN. KOBAYASHI	08. 12. 16
NOTE4:#=TERMINATION STYLE MARKING. (C:CRIMP SOCKET,F:FPC SOCKET,SD:SOCKET FOR FINE COAXIAL CABLES)					
Unless otherwise specified, refer to JIS C 5402.					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-163428-01
	SPECIFICATION SHEET		PART NO.	DF19-20P-1V (56)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL685-0037-0-56	 1/1