



APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-40 °C TO 105 °C (NOTE1)	STORAGE TEMPERATURE RANGE	-10 °C TO +60 °C (NOTE 2)	
	CURRENT	1 A	Storage Humidity Range	Relative humidity 85% max (Not dewed)	
	VOLTAGE	250 V AC	Operating Humidity Range		
SPECIFICATIONS					
ITEM		TEST METHOD	REQUIREMENTS	QT	AT
STRUCTURE					
EXAMINATION OF APPEARANCE, STRUCTURE AND FINISHING		MEASUREMENT VIA VISUAL CHECK AND MEASURING INSTRUMENT	BE CONSISTENT WITH DRAWING.	X	X
MARKING		VISUAL CONFIRMATION		X	X
ELECTRICAL CHARACTERISTICS					
CONTACT RESISTANCE		MEASURE AT 1A DC.	30 mΩ MAX	X	—
CONTACT RESISTANCE UNDER LOW VOLTAGE AND LOW CURRENT CONDITION		MEASURE AT 20 mV AC MAX, 0.1 mA(DC OR 1000Hz)	30 mΩ MAX	X	—
INSULATION RESISTANCE		MEASURE AT 500 V DC	100 MΩ MIN.	X	—
VOLTAGE RESISTANCE		APPLY 650 V AC FOR 1 min.	NO BREAKDOWN.	X	—
MECHANICAL CHARACTERISTICS					
REPEATED MECHANICAL OPERATION		30 TIMES FOR EACH INSERTION AND WITHDRAWAL.	① CONTACT RESISTANCE: 60 mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X X	— —
VIBRATION RESISTANCE		FREQUENCY AT 20 TO 200 Hz, ACCELERATION AT 43.1 m/s <sup>2</sup> ON EACH 3 DIRECTIONS FOR 3h.	① ELECTRICAL INSTANTANEOUS INTERRUPTION IS BELOW 10 μs. ② CONTACT RESISTANCE: 60 mΩ MAX. ③ NO DAMAGE, CRACK OR DISTORTION OF PARTS.	X X X	— — —
IMPACT RESISTANCE		FREQUENCY AT 20 TO 50 Hz, ACCELERATION AT 66.6 m/s <sup>2</sup> FOR 1h.	① ELECTRICAL INSTANTANEOUS INTERRUPTION IS BELOW 10 μs. ② CONTACT RESISTANCE: 60 mΩ MAX. ③ NO DAMAGE, CRACK OR DISTORTION OF PARTS.	X X X	— — —
LOCK STRENGTH		APPLY A PULL FORCE WITH 98N MAX ON THE DIRECTION OF MATING AXIS.	① MATING COMPLETELY DURING THE TEST. ② NO DEFECT ON MATING PARTS AFTER EVALUATION.	X X	— —
ENVIRONMENTAL CHARACTERISTICS					
HUMIDITY RESISTANCE (STEADY STATE)		EXPOSE AT 60 °C, RH:90 ~ 95 % FOR 96h.	① CONTACT RESISTANCE: 60 mΩ MAX. ② INSULATION RESISTANCE:100 MΩ MIN. ③ NO DAMAGE, CRACK OR DISTORTION OF PARTS.	X X X	— — —
THERMAL SHOCK		TEMPERATURE: -40°C (30min) → ROOM TEMP (5min)→105°C (30min)→ ROOM TEMP (5min)UNDER 1000 CYCLES.	① CONTACT RESISTANCE: 60 mΩ MAX. ② INSULATION RESISTANCE:100 MΩ MIN. ③ NO DAMAGE, CRACK OR DISTORTION OF PARTS.	X X X	— — —
HEAT RESISTANCE		EXPOSE AT 105°C FOR 300 h.	① CONTACT RESISTANCE: 60 mΩ MAX. ② NO DAMAGE, CRACK OR DISTORTION OF PARTS.	X X	— —
COLD RESISTANCE		EXPOSE AT -40°C FOR 120 h.	① CONTACT RESISTANCE: 60 mΩ MAX. ② NO DAMAGE, CRACK OR DISTORTION OF PARTS.	X X	— —
RESISTANCE TO SO <sub>2</sub> GAS		EXPOSE TO THE GAS WITH CONCENTRATION OF 500 PPM FOR 8h.	CONTACT RESISTANCE: 60 mΩ MAX.	X	—
RESISTANCE TO SOLDERING HEAT		SOLDER TEMPERATURE, 260°C FOR IMMERSION, DURATION, 10 s	NO DEFORMATION OF APPEARANCE, WITHOUT EXCESSIVE LOOSENESS OF TERMINALS.	X	—
SODERABILITY		SOLDERING AT 245°C FOR 3sec.	NEW SOLDERING SURFACE SHALL COVER AT LEAST 95% OF THE SURFACE BEING IMMERSED.	X	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
					
REMARK (NOTE1) Include temperature rise caused by current-carrying. (NOTE2) "STORAGE" means a long-term storage state for the unused product before assembly to PCB.			APPROVED	HH. TSUKUMO	20200321
			CHECKED	HH. TSUKUMO	20200321
			DESIGNED	DONGCHAN KIM	20200320
			DRAWN	YK. MITSUISHI	20200310
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC-166816-55-00	
	SPECIFICATION SHEET		PART NO.	GT8E-7P-DSA (55)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL758-0066-3-55	 1/1