MINIATURE HIGH POWER RELAY

c Al us

File No.: E134517



File No.:116934



File No.: CQC08002028130



Features

- Ambient temperature up to 125 °C
- 5kV dielectric strength (between coil and contacts)
- Low height: 15.7mm
- Creepage distance >8mm
- Meeting VDE 0700, 0631 reinforce insulation
- UL94, V-0 flammability class
- Product in accordance to IEC 60335-1 available
- UL insulation system: Class F
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: Vertical: (41.0 x 12.7 x 15.7) mm

Horizontal: (45.0 x 12.7 x 15.7) mm

CONTACT DATA			
Contact arrangement	1A, 1B		
Contact resistance	100mΩ max.(at 1A 6VDC)		
Contact material	AgSnO2, AgNi		
Contact rating	20A 250VAC		
Max. switching voltage	440VAC / 300VDC		
Max. switching current	20A		
Max. switching power	5000VA		
Mechanical endurance	1 x 10 ⁷ ops		
Electrical endurance	1H type: 3 x 10 ⁴ ops (20A 277VAC,		
Liectifical efficientation	Resistive load, Room temp., 1s on 9s off)		

CHARACTERISTICS			
Insulation resistance		1000MΩ (at 500VDC)	
Dielectric	Between coil & contacts		5000VAC 1min
		n open contacts	1000VAC 1min
Surge volta	ge (betwe	10kV (1.2 / 50µs)	
Operate time (at nomi. volt.)		15ms max.	
Release time (at nomi. volt.)			8ms max.
Temperature rise (at nomi. volt.)			55K max.
Shock resistance *	otopoo *	Functional	98m/s ²
	Destructive	980m/s ²	
Vibration resistance *		1A: 10Hz to150Hz 10g	
		1B: 10Hz to150Hz 5g	
Humidity		5% to 85% RH	
Ambient temperature		-40°C to 125°C	
Termination		PCB & QC	
Unit weight		Approx. 16g	
Construction		Flux proofed	

Notes: 1) The data shown above are initial values.

2) * Index is not that of relay length direction.

COIL		
Coil power	Approx. 400mW	

COIL DATA					at 23°C
	Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. Voltage VDC 1)	Coil Resistance Ω
	5	3.50	0.5	7.5	62 x (1±10%)
	6	4.20	0.6	9.0	90 x (1±10%)
	9	6.30	0.9	13.5	202 x (1±10%)
	12	8.40	1.2	18.0	360 x (1±10%)
	18	12.6	1.8	27.0	810 x (1±10%)
	24	16.8	2.4	36.0	1440 x (1±10%)
	48 ²⁾	33.6	4.8	72.0	5760 x (1±15%)
	60 ²⁾	42.0	6.0	90.0	7500 x (1±15%)

Notes: 1) Maximum voltage refers to the maximum voltage which relay coil could endure in a short period of time.

2) For products with rated voltage \geq 48V, measures should be taken to prevent coil overvoltage in order to protect coil in test and application (eg. Connect diodes in parallel).

SAFETY	SAFETY APPROVAL RATINGS				
VDE	AgNi	1 Form A	18A 250VAC at 105°C 16A 250VAC at 125°C 12A 400VAC at 105°C		
		1 Form B	16A 250VAC at 125°C 12A 400VAC at 105°C		
UL/CUL	AgNi	1 Form A 1 Form B	20A 277VAC		

Notes: 1) All values unspecified are at room temperature.

2) Only typical loads are listed above. Other load specifications can be available upon request.