



Character

- ◇ 50A contact switching capability
- ◇ Only impulse excitation needed, both for single and double coil.
- ◇ Low power consumption, strong load capability
- ◇ Small in size, PCB type installation
- ◇ 4KV dielectric strength between coil and contacts
- ◇ RoHS compliant
- ◇ Outline dimensions: (39 x 30.2 x 15) mm

Contact Data

Contact Form	1B	1C
Contact Material	AgSnO ₂	AgSnO ₂
Contact Resistance	Max.2.0mΩ (1A 6VDC)	Max.2.0mΩ (1A 6VDC)
Rated Load(Resistive)	50A 250VAC	40A 250VAC
Max. Switching Voltage	440VAC	440VAC
Max. Switching Current	1B 50A	1C 40A
Max. Switching Power	12500VA	10000VA
Service Life	Mechanical Endurance	1×10 ⁸ OPS
	Electrical Endurance	1B 3X10 ⁴ OPS 1C 1X10 ⁴ OPS
Max. Short-circuit Current	1200A/10ms	1200A/10ms

Characteristics

Operate Time	20ms Max.	20ms Max.
Release Time	20ms Max.	20ms Max.
Insulation Resistance (500VDC)	1000MΩ Min.	1000MΩ Min.
Dielectric Strength (50/60hz, 1min)	Contact to Coil	4000VAC
	Across Open Contacts	1500VAC
	Contact to contact	1500VAC
Surge Voltage (1.2/50 μs)	Contact to Coil	12KVAC
Creepage Distance	8mm	8mm
Unit Weight	About 44g	About 44g

Environmental Data

Ambient Temperature	-40℃ ~ +85℃	Relative Humidity	5%-85% RH
Vibration	10-55Hz 1.5mm	Shock	98m/s ²

Coil Data (20°C)

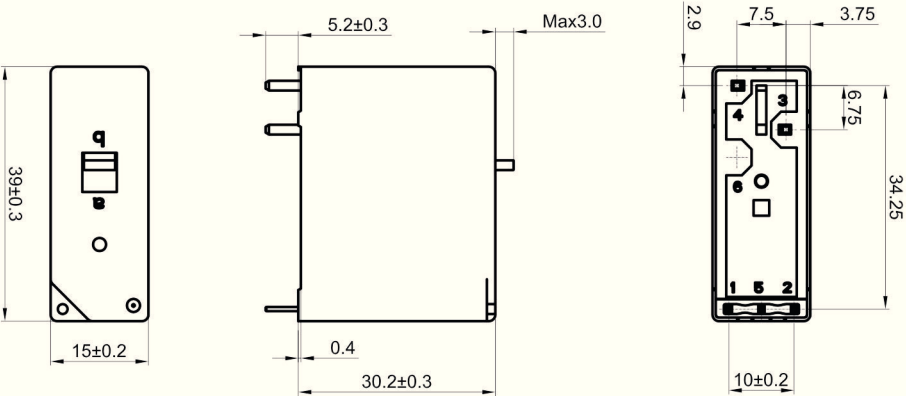
Coil Voltage (VDC)	Coil Resistance(Ω) $\pm 10\%$		Coil Power(w)		Operating Voltage (VDC)	Releasing Voltage (VDC)	Allowing voltage (VDC)	Pulse Duration (ms)
	Single	Double	Single	Double				
<input type="checkbox"/> 5	25	12.5/12.5	1.0	2.0	≤ 3.75	≤ 3.75	7.5	≥ 50
<input type="checkbox"/> 6	36	18/18			≤ 4.5	≤ 4.5	9	
<input type="checkbox"/> 9	81	40.5/40.5			≤ 6.75	≤ 6.75	13.5	
<input type="checkbox"/> 12	144	72/72			≤ 9	≤ 9	18	
<input type="checkbox"/> 24	576	288/288			≤ 18	≤ 18	36	
<input type="checkbox"/> 48	2304	1152/1152			≤ 36	≤ 36	72	

Ordering information

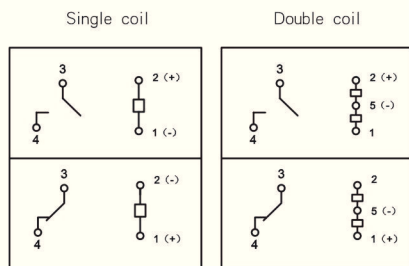
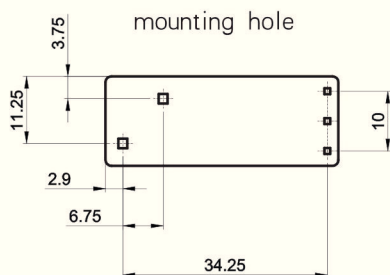
GRT508Y	50A	1C	12VDC	S	XX	Terminal type:	Custom design
						Coil type:	S: single coil D: double coil
						Coil voltage:	6, 9, 12, 24V
						Contact form:	1C: a set of contacts remain closed
						Contact current:	50A
						Relay Series:	GRT508Y

Dimensional Drawings/Wiring Diagrams(unit:mm)

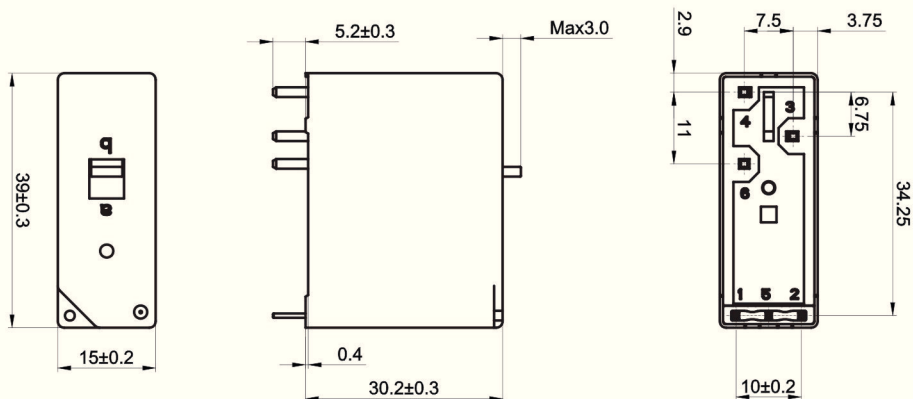
VERSION:1B



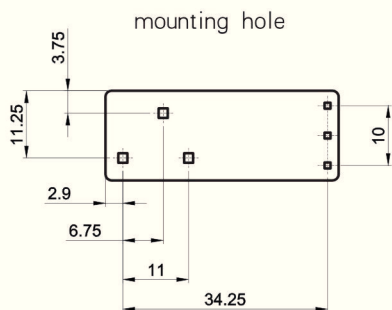
Note: No tolerance marked. If dimension $\leq 1\text{mm}$, the tolerance is $\pm 0.2\text{mm}$; if dimension 1-5mm, the tolerance is $\pm 0.3\text{mm}$; if dimension $\geq 5\text{mm}$, the tolerance is $\pm 0.5\text{mm}$.



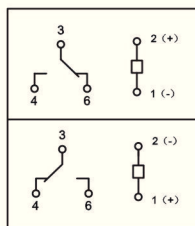
VERSION:1C



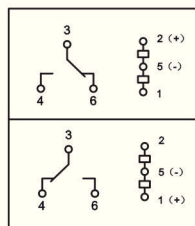
Note: No tolerance marked. If dimension $\leq 1\text{mm}$, the tolerance is $\pm 0.2\text{mm}$; if dimension 1-5mm, the tolerance is $\pm 0.3\text{mm}$; if dimension $\geq 5\text{mm}$, the tolerance is $\pm 0.5\text{mm}$.



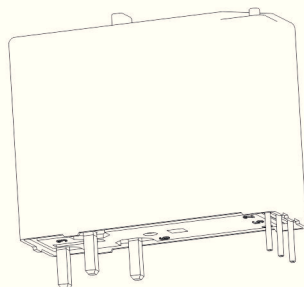
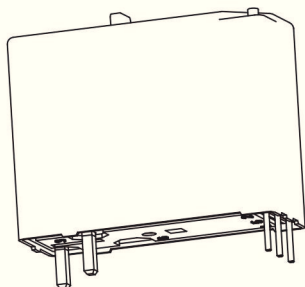
Single coil



Double coil



Typical Terminal Type



Typical application

- Smart Meter
- Electric Remote Control
- Smart Home