

● Features

- 20A switching capability
- 1 Form A configurations
- Subminiature, standard PCB layout
- Plastic sealed and flux proofed types available
- UL insulation system: Class F
- Environmental friendly product (RoHS compliant)
- Dimensions: 18.2 x 10.2 x 15.5 mm



● Application

- Smart Home Solution / Home Appliance / Temperature Control / Industrial Control / Security System / Anti-Theft System, etc.

● Contact Data (at 23°C)

Contact Arrangement	1A
Contact Material	Ag Alloy
Contact Rating	10A 250VAC / 18A 277VAC / 20A 250VAC
Max. Switching Power	5540VA / 600W
Max. Switching Voltage	277VAC / 30VDC
Max. Switching Current	20A
Contact Resistance	$\leq 100\text{m}\Omega$ (6VDC 1A)
Electrical Endurance	1×10^5
Mechanical Endurance	1×10^7

● Coil Parameter

Standard Type

Coil Voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
3	3.9	20	2.25	0.15	0.45
5	6.5	56	3.75	0.25	
6	7.8	80	4.50	0.30	
9	11.7	180	6.75	0.45	
12	15.6	320	9.00	0.60	
18	23.4	720	13.5	0.90	
24	31.2	1280	18.0	1.20	
48	62.4	5120	36.0	2.40	

Sensitive Type

Coil Voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
3	4.5	45	2.25	0.15	0.20
5	7.5	125	3.75	0.25	
6	9.0	180	4.50	0.30	
9	13.5	405	6.75	0.45	
12	18.0	720	9.00	0.60	
18	27.0	1620	13.5	0.90	
24	36.0	2880	18.0	1.20	
48	72.0	11520	36.0	2.40	

● Operation Condition

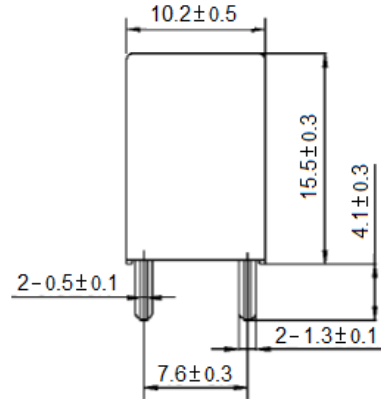
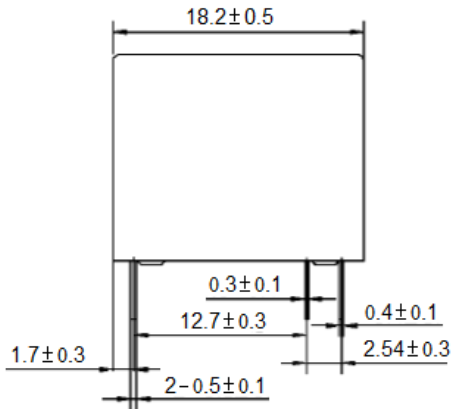
Insulation Resistance		1000MΩ min (at 500VDC)
Dielectric Strength	Between Contacts	1500V
	Between Contact and Coil	4000V
Shock Resistance	Functional	98m/s ²
	Endurance	980m/s ²
Vibration Resistance		10~55Hz double amplitude 1.5mm
Ambient Temperature		-40 ~ +85°C
Operate Time		≤ 10ms
Release Time		≤ 10ms
Relative Humidity		5%~85%
Weight		Approx. 6g

● Ordering Information

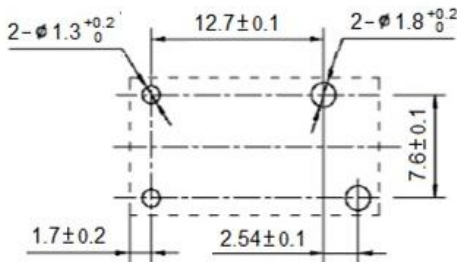
		GC	-12VDC	-A	45	- S	16	(XXX)
Model								
Coil Voltage	3, 5, 6, 9, 12, 18, 24, 48 VDC							
Contact Arrangement	A: 1 Form A							
Coil Power	45: 450mW 20: 200mW (only for 1 Form A)							
Construction	Nil: Flux tight S: Sealed							
Contact Current	16: 16A 20: 20A							
Special Code	Nil: Standard XXX: Customer special requirement							

● Dimensions (UNIT: mm)

Outline Dimensions



Mounting (Bottom views)

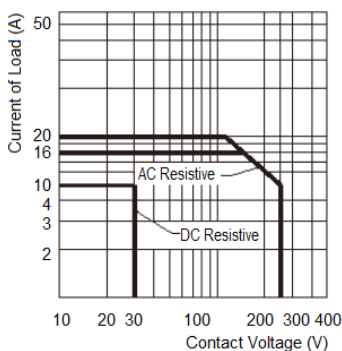


Wiring Diagram (Bottom views)

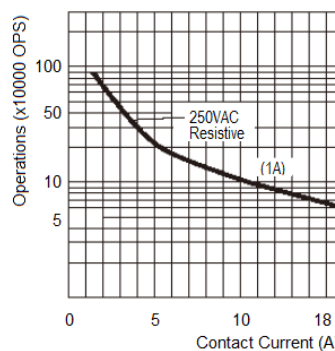


● Engineering Data

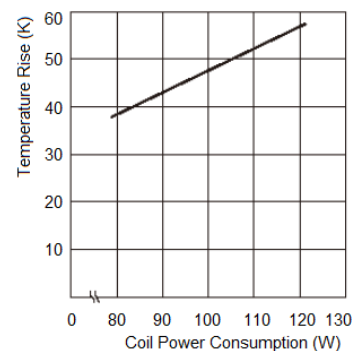
Max. Operation Power



Endurance Curve



Coil Temperature Rise



Remark: 1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$;

outline dimension $>1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $>5\text{mm}$, tolerance should be $\pm 0.5\text{mm}$.

2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

Disclaimer

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact IOEC for the technical service. However, it is the user's responsibility to determine which product should be used only.

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