

● Features

- 10A switching capability
- 1 Form A and 1 Form C configurations
- Subminiature, standard PCB layout
- Plastic sealed and flux proofed types available
- 3000VAC Dielectric strength between coil and contact
- Environmental friendly product (RoHS compliant)
- Dimensions: 19.2 x 15.5 x 15.25 mm



● Application

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

● Contact Data

Contact Arrangement	1A, 1C
Contact Material	Ag Alloy
Contact Rating	10A 250VAC 10A 30VDC
Max. Switching Power	2500VA
Max. Switching Voltage	250VAC
Max. Switching Current	10A
Contact Resistance	$\leq 100\text{m}\Omega$
Electrical Endurance	1×10^5
Mechanical Endurance	1×10^7

● Coil Parameter (at 23°C)

0.36W 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	25	2.25	0.30	0.36
5	6.5	70	3.75	0.50	
6	7.8	100	4.50	0.60	
9	11.7	225	6.75	0.90	
12	15.6	400	9.00	1.20	
24	31.2	1600	18.0	2.40	
48	62.4	6400	36.0	4.80	

0.45W 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	0.30	0.45
5	6.5	55.6	3.75	0.50	
6	7.8	80	4.50	0.60	
9	11.7	180	6.75	0.90	
12	15.6	320	9.00	1.20	
24	31.2	1280	18.0	2.40	
48	62.4	5120	36.0	4.80	

● Coil Parameter (at 23°C)

0.64W Type

Coil voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
9	11.7	127	5.85	0.45	0.64
12	15.6	225	7.80	0.60	
24	31.2	900	15.6	1.20	

0.80W Type

Coil voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
9	11.7	101	5.85	0.45	0.80
12	15.6	180	7.80	0.60	
24	31.2	720	15.6	1.20	

● Operation Condition

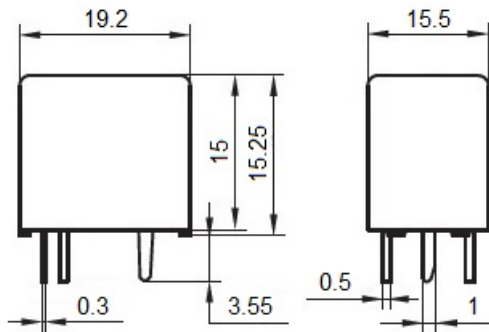
Insulation Resistance		250M Ω min (at 500VDC)
Dielectric Strength	Between Contacts	750V
	Between Contact and Coil	3000V
Shock Resistance	Functional	98m/s ²
	Endurance	980m/s ²
Vibration Resistance		10~55Hz double amplitude 1.5mm
Ambient Temperature		-40~85°C
Operate Time		$\leq 10\text{ms}$
Release Time		$\leq 5\text{ms}$
Relative Humidity		5%~85%
Weight		Approx. 9.5g

● Ordering Information

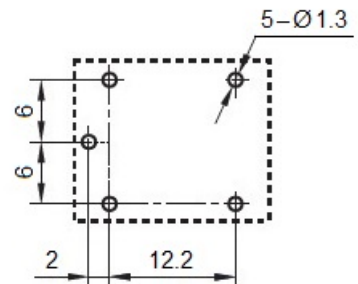
		GF2	-12D	45	-C	-S	(XXX)
Model							
Coil Voltage	3, 5, 6, 9, 12, 24, 48 VDC						
Coil Power	Nil: 360mW		45: 450mW				
	64: 640mW		80: 800mW				
Contact Arrangement	A: 1 Form A		C: 1 Form C				
Construction	Nil: Flux tight		S: Sealed				
Special Code	Nil: Standard		XXX: Customer special requirement				

● Dimensions (UNIT: mm)

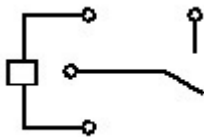
Outline Dimensions



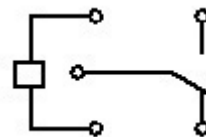
Mounting (Bottom views)



Wiring Diagram (Bottom views)



1 Form A



1 Form C

- 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 $\pm 0.4\text{mm}$.
- 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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