

NOT FOR NEW DESIGN



- Miniature - only 18.4 x 15.2 x 10.2mm
- 10A @ 250VAC
- Cost effective

ROHS
Compliant ✓

Contacts

Contact arrangement	SPST-NO (1 Form A)
Contact material	AgSnO ₂
Max. switching voltage	AC/DC 250VAC, 28VDC
Min. switching current / voltage	100mA / 12VDC
Rated load	10A / 250VAC
Max. continuous current	10A
Max. switching current	10A
Max. switching power	2500VA / 280W
Initial resistance	<50mΩ max. at 0.1A/6VDC

Coil

Rated voltage	DC 3...48V
Must release voltage	≥0.1Un
Operating range	See table 1
Rated power consumption	DC 450mW

Insulation

Insulation resistance	1000MΩ at 500VDC, 50%RH
Surge resistance	coil to contact 10,000V 1.2 x 50 μs
UL Insulation system	Class F (standard)
Dielectric strength	coil to contact 2800Vrms, 50/60Hz, 1min
	contact to contact 1000Vrms, 1min

General Data

Operating time	typ. 10ms
Release time	typ. 5ms
Electrical life (at rated load)	ops. 1 x 10 ⁵ (30 ops per min max.)
Mechanical life (no load)	ops. 1 x 10 ⁷ (300 ops per min max.)

Environmental

Ambient temperature	operating -40 to +85°C
	storage -40 to +85°C
Shock resistance	functional 98.1m/s ² min
	destructive 981m/s ² min
Vibration resistance	DA 1.5mm 10-55Hz
Dimensions	L x W x H 18.4 x 15.2 x 10.2mm
Weight	approx. 7g approx.

Ordering Code

D G 3 3 - 3 0 2 1 - 3 5 - 1 0 1 2

Series

Coil code:

See table 1

Contact material

30: AgSnO₂

Contact arrangement

21: SPST-NO

Environmental protection

3: In cover, sealed - IP67

Mounting & terminations

5: For PCB

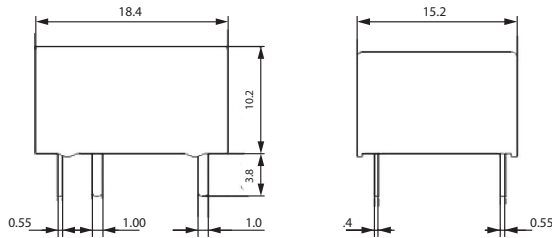
Coil Data (at approx 450mW)

Table 1

Coil code	Nominal voltage (VDC)	Coil Resistance (Ω) ±10%	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Max. Allowable voltage (VDC)
1003	3	20	2.25	0.30	3.9
1005	5	55	3.75	0.50	6.5
1006	6	80	4.50	0.60	7.8
1009	9	180	6.75	0.90	11.7
1012	12	320	9.00	1.20	15.6
1024	24	1280	18.00	2.40	31.2
1048	48	5120	36.00	4.80	62.4

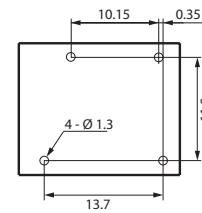
Dimensions mm

Fig. 1



PCB Mounting Dimensions mm (bottom view)

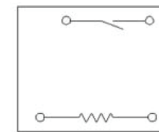
Fig. 2



Mounting Holes

Wiring Diagram (bottom view)

Fig. 3



Notes:

- 1: All parameters, unless otherwise specified, are measured at ambient temperature of 23°C.
- 2: Maximum make current refers to inrush current of motor load.
- 3: Electrical life is strongly dependent of switching frequency, On/Off ratio and environmental conditions.