



- Miniature - only 19 x 15.4 x 15mm
- 12A @ 250VAC, 15A @ 125VAC
- 105°C Operating Temperature
- Domestic appliances, office equipment etc.



ROHS Compliant ✓

### Contacts

Contact arrangement	SPST-NO (1 Form A); SPDT (1 Form C)
Contact material	AgSnO <sub>2</sub> (standard)
Max. switching voltage	AC/DC 250VAC, 28VDC
Min. switching current / voltage	100mA / 12VDC
Rated load	UL 15A/ 125VAC TV-5
	VDE 10A/250VAC (NO Contact), 7A/250VAC (NC Contact)
Max. switching current	15A
Max. switching power	3000VA / 280W
Initial resistance	<50mΩ, max. at 1A/6VDC

### Coil

Rated voltage	DC 3...48V (3V not UL)
Must release voltage	≥0.1Un
Operating range	See table 1
Rated power consumption	DC 360mW

### Insulation

Insulation resistance	1000MΩ at 500VDC, 50%RH
Insulation category (creepage resistance)	CTI250
UL Insulation system	Class F (155°C)
Dielectric strength	coil to contact 1500Vrms, 1min (50/60Hz)
	contact to contact 1000Vrms, 1min (50/60Hz)
Surge resistance	3000V (between coil & contact, 1.2 x 50μs)

### General Data

Operating time	typ. 10ms
Release time	typ. 5ms
Electrical life	ops. 1 x 10 <sup>5</sup> (at rated resistive load - 1,800 ops/hr)
Mechanical life	ops. 1 x 10 <sup>7</sup> (no load, 18,000 ops/hr)

### Environmental

Ambient temperature	operating	-40 to +105°C (40 to 85°C VDE)
	storage	-40 to +105°C
Shock resistance	functional	10g 11ms
	destructive	100g
Vibration resistance		DA 1.5mm 10-55Hz
Dimensions	L x W x H	19.5 x 15.4 x 15mm
Weight	approx.	9g approx.

### Ordering Code

D G 3 1 H - 3 0 1 1 - 3 5 - 1 0 0 5

Series

Coil code:

See table 1

Contact material

30: AgSnO<sub>2</sub>

Contact arrangement

11: SPDT (1C/O, 1 form C)

21: SPST-NO

Environmental protection

3: In cover, sealed - IP67

Mounting & terminations

5: For PCB

Coil Data (360mW)

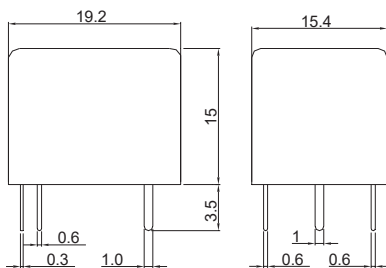
Table 1

Coil code	Nominal voltage (VDC)	Coil resistance $\Omega$ $\pm 10\%$	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Max. allowable voltage (VDC)
1003 <sup>1</sup>	3	25	2.25	0.30	3.9
1005	5	70	3.75	0.50	6.5
1006	6	100	4.50	0.60	7.8
1009	9	225	6.75	0.90	11.7
1012	12	400	9.00	1.20	15.6
1024	24	1600	18.00	2.40	31.2
1048	48	6400	36.00	4.80	62.4

<sup>1</sup> 3VDC Coil not UL approved.

Dimensions mm

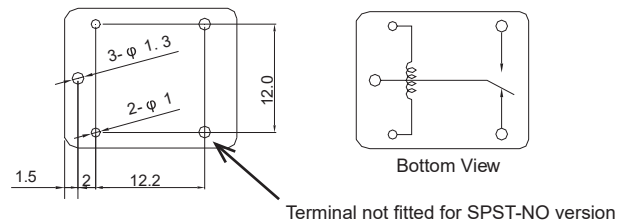
Fig. 1



Tolerances:  
 <1mm  $\pm 0.2$ mm  
 1 ~ 5mm  $\pm 0.3$ mm  
 >5mm  $\pm 0.5$ mm

PCB Mounting Dimensions mm

Fig. 2



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.