



- Miniature - only 19 x 15.5 x 15mm
- Optimised for DC switching
- Cost effective

ROHS  
Compliant ✓

## Contacts

Contact arrangement	SPST-NO (1 Form A); SPDT (1 Form C)	
Contact material	AgSnOInO, AgNi0.15, AgNi 90/10	
Max. switching voltage	DC	16V
Min. switching current / voltage	100mA / 12VDC	
Max continuous current	20A @ 16VDC	
Max. switching current	make	20A
	break	12A
Initial contact resistance	≤100mΩ, max. at 0.1A, 6VDC	

## Coil

Rated voltage	DC	6V, 12V, 24V
Must release voltage	≥0.1Un	
Operating range	See Table 1	
Rated power consumption	DC	800mW

## Insulation

Insulation resistance	100MΩ at 500VDC, 50%RH	
Dielectric strength	coil to contact	1000Vrms, 1min
	contact to contacts	750Vrms, 1min

## General Data

Operating time	typ.	10ms
Release time	typ.	5ms
Electrical Life <sup>3</sup>	ops.	1 x 10 <sup>5</sup>
Mechanical life	ops.	1 x 10 <sup>7</sup>

## Environmental

Ambient temperature	operating	-40 to +85°C
	storage	-40 to +85°C
Shock resistance	functional	10g, 11ms
	destructive	100g
Vibration resistance	DA 1.5mm 20-220Hz	
Dimensions	L x W x H	19 x 15.5 x 15mm
Weight	approx.	10g

## Ordering Code

D G 3 1 A - 7 0 2 1 - 3 5 - 1 0 2 4

### Series

### Contact material

20: AgNi 90/10

70: AgSnOInO

80: AgNi0.15

### Contact arrangement

11: SPDT (1 x C/O, 1 Form C)

21: SPST-NO (1 Form A)

### Environmental protection

2: In cover, flux tight - IP40

3: In cover, sealed - IP67

### Mounting & terminations

5: PCB Mounting

### Coil code:

See table 1

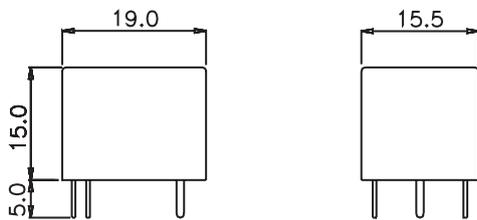
Coil Data

Table 1

Coil code	Nominal voltage (VDC)	Coil Resistance ( $\Omega$ ) $\pm 10\%$	Must operate voltage max. (VDC)	Must release voltage min. (VDC)
1006	6	45	3.2	0.6
1012	12	180	6.3	1.2
1024	24	720	12.6	2.4

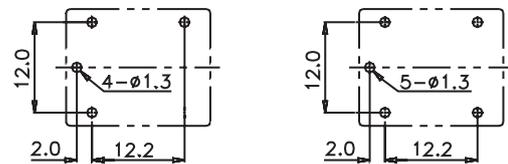
Overall Dimensions mm

Fig. 1

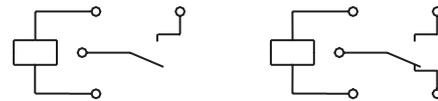


PCB Mounting Dimensions and Wiring mm

Fig. 2



Mounting Holes (Bottom View)



Wiring Diagrams (Bottom View)

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.