



- 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 ³	ops. 1 x 10 ⁵
Mechanical life	ops. 1 x 10 ⁷

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 - 8 0 1 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)

12: SPST-NO

Environmental protection

2: In cover, flux tight - IP40

3: In cover, sealed - IP67

Mounting & terminations

5: PCB Mounting

Coil code:

See table 1

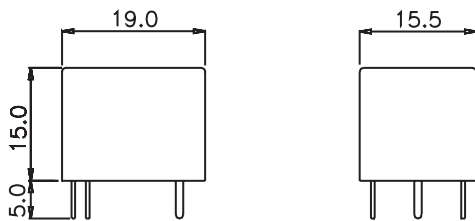
Coil Data

Table 1

Coil code	Nominal voltage (VDC)	Coil Resistance (Ω) $\pm 10\%$	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

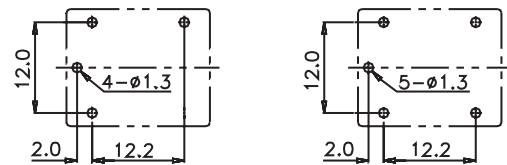
Overall Dimensions mm

Fig. 1

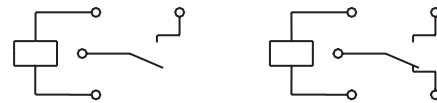


PCB Mounting Dimensions and Wiring mm

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.