

- Reduced height micro plug-in relay
- Up to 40A 12VDC inrush capability
- Cost effective

RoHS
Compliant ✓

Contacts

Contact arrangement	SPST-NO (1 Form A)
Contact material	Ag alloy
Max. switching voltage	DC 16VDC
Min. switching current / voltage	1mA/1VDC (AgNi0.15)
Rated load	DC1 20A/12VDC
Max. switching current	make 40A / 10 minutes break 15A
Voltage drop	0.2V/20A

Coil

Rated voltage	DC 12V
Must release voltage	≥0.8VDC
Operating range	See Table 1
Rated power consumption	1.2W

Insulation

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

General Data

Operating time	typ. 9ms
Release time	typ. 7ms
Electrical life	ops. 1 x 10 ⁵
Mechanical life	ops. 1 x 10 ⁷

Environmental

Ambient temperature	operating -40 to +120°C storage -40 to +155°C
Shock resistance	functional 20g, 11ms destructive 100g
Vibration resistance	DA 1.27mm 10-40Hz / 40-70Hz:5g DA 0.5mm 100-500Hz: 10g
Dimensions	L x W x H 22.5 x 15.2 x 15.7mm (excluding terminals)
Weight	approx. 14g

Ordering Code

D G 9 0 - 7 0 2 1 - 3 6 - 1 0 1 2

Series

Contact material

20: AgNi
70: AgSnOInO

Coil code:

See table 1

Contact arrangement

21: SPST-NO (1 N/O, 1 Form A)

Environmental protection

3: In cover, sealed - IP67
7: In cover, dust cover - IP54

Mounting & terminations

6: Flat blades

Coil Data

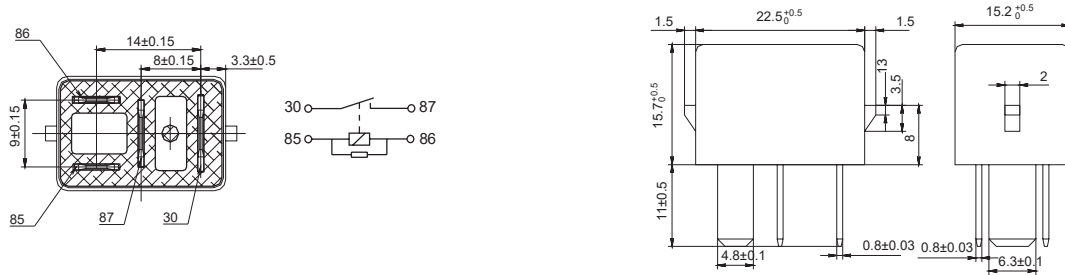
Table 1

Coil code	Nominal voltage (VDC)	Coil resistance (Ω) ±10%	Must operate voltage Max. (VDC)	Allowable voltage (VDC)*	Must release voltage min. (VDC)
1012	12	120	7.5	20.4	0.8

* At ambient temperature of 85°C, maximum allowable voltage should be reduced by 28%.

Overall Dimensions and Connection Diagram mm

Fig. 1



Notes:

- 1: All parameters, unless otherwise specified, are measured at ambient temperature of 23°C.
- 2: Electrical life obtained at resistive or inductive load at 20A, 15VDC with suitable arc suppression circuit attached and with operating frequency of 1 op/sec.
- 3: Maximum make current refers to lamp load inrush current.