

- General purpose automotive or industrial relays
- High inrush capabilities
- Ideal for DC motor control
- High continuous DC current capacity
- Industry standard terminal arrangement
- Optimised for up to 110VDC switching with magnetic arc blowout
- RoHS Compliant

RoHS
Compliant ✓

Contacts

Contact arrangement	SPST-NO (1 Form A); SPDT (1 Form C)
Contact material	AgSnO ₂
Max. switching voltage	DC 110VDC
Contact rating (through N/O & N/C contacts)	25A @ 36VDC
	20A @ 48VDC
	15A @ 72VDC
	7A @ 110VDC
Max. switching current (3 sec)	120A@12.8VDC
Min. switching current	100mA / 12 VDC
Initial contact resistance	<100mΩ at 0.1A/6VDC

Coil

Nominal voltage	DC 6...110V
Must release voltage	See coil table 1
Operating range of supply voltage	See coil table 1
Rated power consumption	DC 1.7W / 1.8W

Insulation

Insulation resistance	100MΩ at 500VDC, 50%RH, 25°C
Dielectric strength	
coil to contact	750Vrms / 1 min
contact to contact	500Vrms / 1 min

General Data

Operate time	≤ 15ms (Excl. bounce & without coil suppression)
Release time	≤ 15ms (Excl. bounce & without coil suppression)
Electrical Life	ops. 1x10 ⁶ (at rated load, 10 ops./minute)
Mechanical life	ops. 1 x 10 ⁶

Environmental

Ambient temperature	operating	-40 to +85°C (max = 155°C)
	storage	-40 to +85°C (at nominal coil voltage - see table 1)
Shock resistance	destructive	100g
	functional	30g 8ms
Vibration resistance		10 to 2000Hz 4.4g
Dimensions	L x W x H	35 x 30.5 x 25mm
Weight	approx.	65g approx depending on mounting

Ordering Code

D G 8 5 B M - 5 0 2 1 - 7 6 - 1 0 1 2 - D R											
Series				Coil code: See table 1							
Contact material											
50: AgSnO ₂											
Contact arrangement											
11: SPDT (1C/O, 1 Form C)											
21: SPST-NO (1 N/O, 1 Form A)											
Mounting & terminations IP54											
7: Dust cover											
9: Cover with plastic mounting bracket											
Connection mode											
5: PCB Terminals											
6: Flat blades											
Options											
Blank: No options											
R: Integral resistor											
D: Integral diode +85, -86											
DR: Integral diode reversed -85, +86 standard											

Coil Data

Table 1

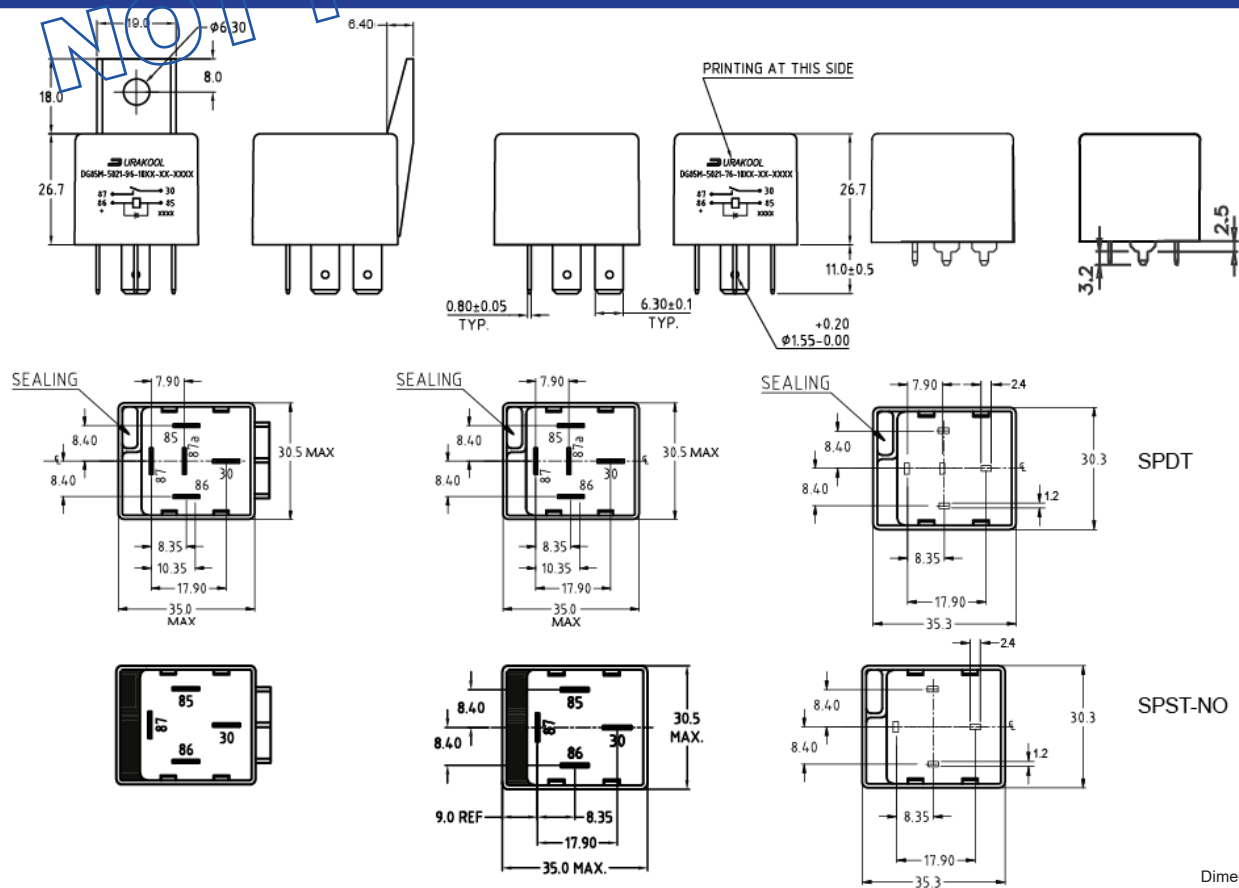
Coil code	Nominal voltage (VDC)	Coil resistance (Ω) ±10%	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Parallel resistor (option) (Ω) ±10%
1006	6	*	4.0	0.6	150
1009	9	*	6.0	0.9	330
1012	12	85	8.0	1.2	1000
1024	24	305	16.0	2.4	2200
1036	36	750	24.0	3.6	4700
1048	48	1200	32.0	4.8	10000
1110	110	*	73.2	11.0	not available

All specifications at 23°C ambient

* Contact factory for availability.

Dimensions

Fig. 1



Connection diagrams

Fig. 2

