DG17M Series
10A 450VDC pre-charge relays



- 15A Continuous current capacity
- 20A 450VDC Fault condition breaking capacity
- Miniature case size
- PCB mounting
- Magnet arc blowout
- Automotive oriented design

ROHS Compliant ✓

Contacts

Contact arrangement		SPST-NO-DM, SPST-NC-DM	
Contact material		$AgSnO_2$	
Rated current	DC1	15A / 450VDC (10A max.Break)	
Max. switching voltage		450VDC (for 600VDC - consult Durakool)	
Max. breaking capacity		4500W	
Initial contact resistance		10mΩ at 20A	
Min. switched load		0.5A / 5VDC	
		SPST-NO-DM	SPST-NC-DB
Max. continuous current	DC1	15A	10A
Max. switching current	make	15A	12A
	break	15A	10A
	fault condition	20A ON/ 20A OFF 10 operations (min.)	
Max. operating frequency	rated load	360 cycles/hour	

Coil

Operating range	DC	12 ~ 60V See Table 1
Rated power consumption		Approx. 3W

Insulation

Coil insulaton system		IEC 31, CLASS F 155°C
Insulation resistance		>100 MΩ at 500VDC, 50%RH
Dielectric strength	coil to contact	1300Vrms, 1min
	open contacts	1500Vrms, 1min

General Data

Electrical life at full rated load	cycles	2 x 10^5 10A 450VDC (10A ON / 0A OFF)
Mechanical life	cycles	>1 x 10^7

Environmental

Environmental protection		IP67
Ambient temperature	operating	-40 to +85°C
	storage	-40 to +125°C
Mechanical shock	functional	10g, 11ms
	destructive	100g
Vibration resistance		NO: 20g / NC: 10g 10-200Hz
Dimensions	L x W x H	26.2 x 17.7 x 19.7mm (excluding pcb pins)
Weight	approx.	14g

Ordering Code

D G 1 7 M - 5 0 2 1 - 3 5 - 1 0 1 2

- Series
- Coil code: See table 1
- Contact material
  - 50: $AgSn0_2$
- Contact arrangement
  - 21: SPST-NO-DM
  - 31: SPST-NC-DB
- Mounting & terminations
  - 35: PCB Mounting, sealed IP67

Specifications are subject to change without notice. E&OE.

DC Coil Data — Table 1

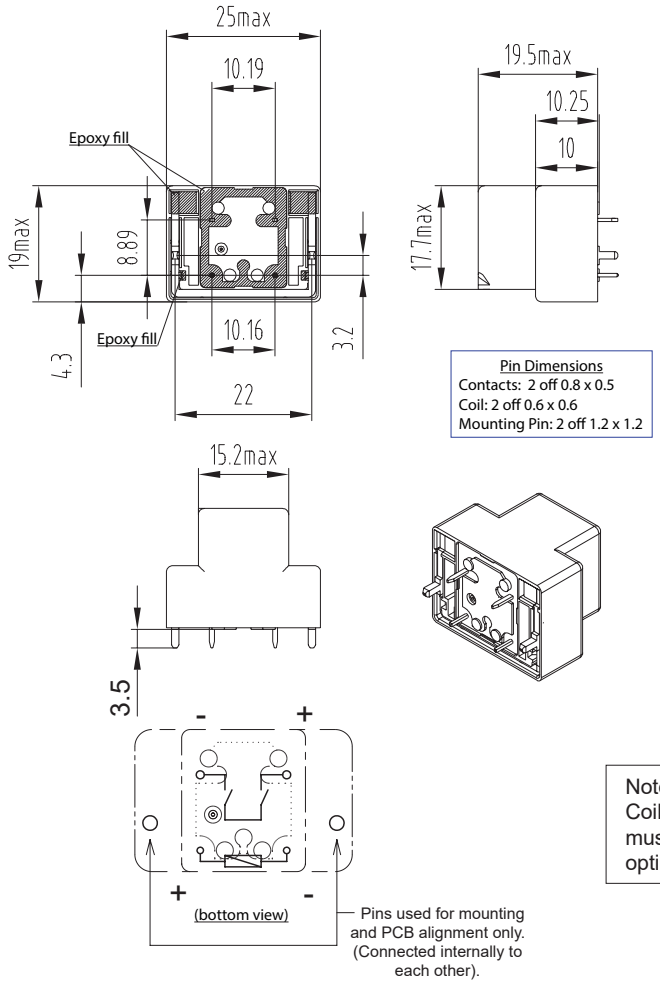
Coil code	Nominal voltage (VDC)	Must operate voltage max. (VDC@ 23°C)	Max. allowable voltage (VDC)	Must release voltage min. (VDC)	Coil resistance Ω ±10% (at 30°C)	Coil current (mA)
1006	6	3.75	8	0.5	28.0	215
1012	12	7.5	16	1.0	130	92
1024	24	15.0	31	2.0	520	46

* At ambient temperature of 85°C, maximum allowable voltage should be reduced to 72%

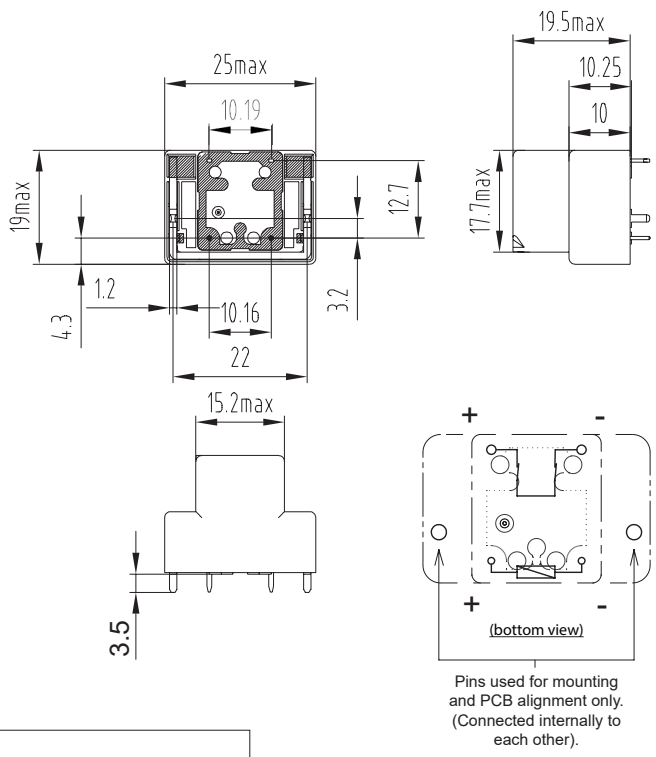
Operate time	typ. 3ms
Release time	typ. 1.5ms

Dimensions — Fig 1

DG17M-5021-35-10** (SPST-NO-DM)



DG17M-5031-35-10** (SPST-NC-DB)



Note:
Coil and contacts are polarized and must be connected as shown for optimum performance.

Dimensions in mm

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