DG17
sub-miniature pcb automotive relay

- 15A continuous current capacity
- AgSnOInO contacts for motor & lamp loads
- open, dust cover and sealed versions
- Automotive oriented design

RoHS Compliant

Contacts

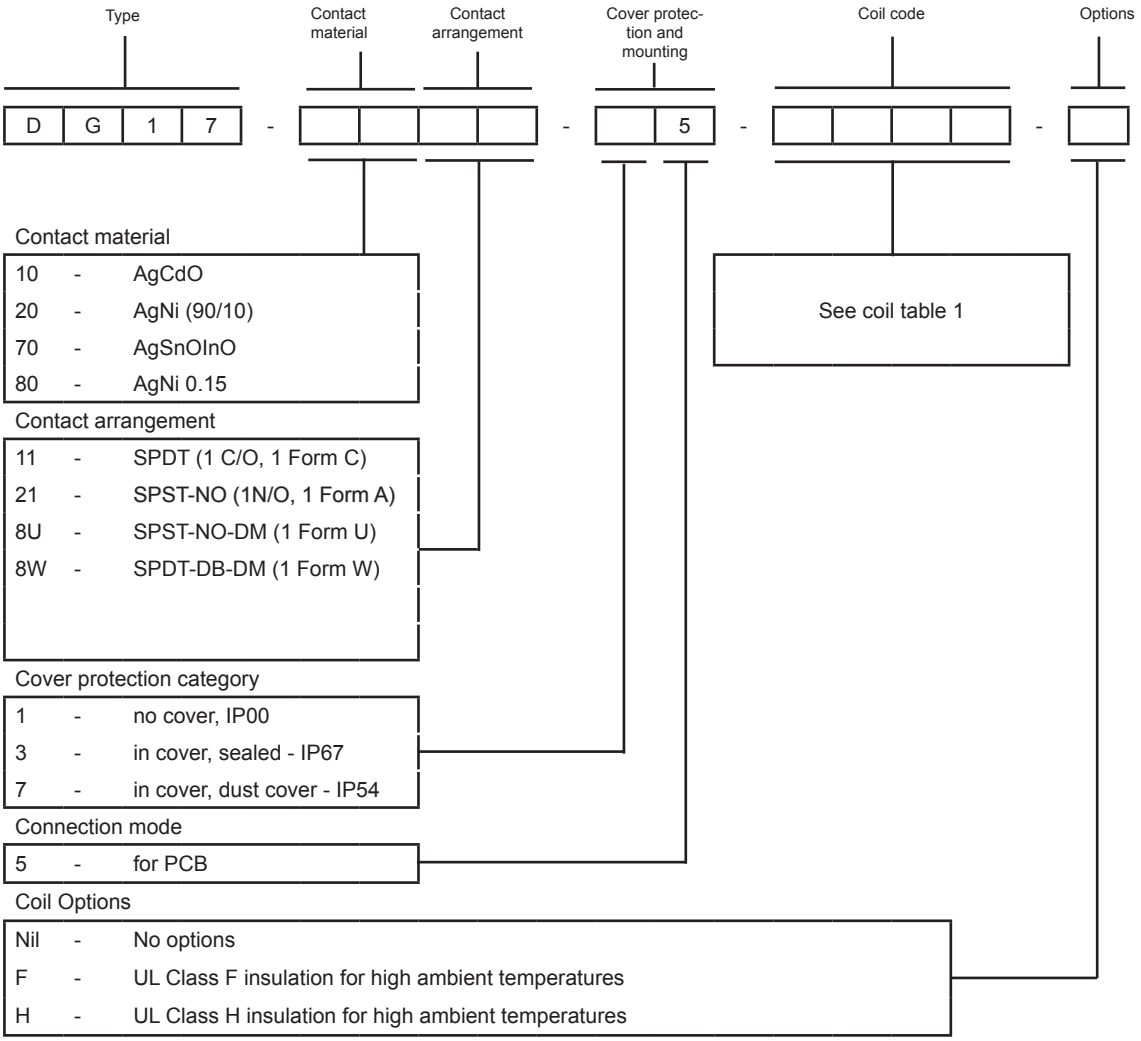
Contact number & arrangement		SPST-NO (1 Form A); SPDT (1 Form C); SPST-NO-DM (1 Form U); SPDT-DB-DM (1 Form W)					
Contact material		AgNi0.15; AgNi90/10; AgSnOInO; AgCdO					
Max. switching voltage	DC	Current dependent - see Fig 3					
Min. switching current / voltage		0.1A/5VDC (AgNi0.15), 0.5A/5VDC (AgSnOInO)					
		1 Form A	1 Form C		1 Form U	1 Form W	
			NO	NC		NO	NC
Max. continuous current	DC1	15A	15A	10A	2 x 10A	2 x 7A	2 x 5A
Max. switching current	Make	60A (100A AgSnOInO)	60A (100A AgSnOInO)	12A	2 x 40A (70A AgSnOInO)	2 x 30A (50A AgSnOInO)	2 x 5A
	Break	20A	20A	10A	2 x 20A	2 x 15A	2 x 5A
Initial resistance		100mΩ, max. at 0.1A/6VDC					
Coil							
Rated voltage	DC	6, 12, 24V					
Must release voltage		See coil table 1					
Operating range of supply voltage		See coil table 1					
Rated power consumption	DC	1.1W approx.					
Insulation							
Insulation resistance		100MΩ at 500VDC, 50%RH					
Dielectric strength	coil to contact	500Vrms, 1 min.					
General Data							
Operating time (typical)	mS	3					
Release time (typical)	mS	1.5					
Electrical Life	ops	2×10^5 (see Note 2)					
Mechanical life	ops	1×10^7					
Dimensions	L x W x H	17.7 x 15.2 x 19.7 (covered - excluding terminals)					
Weight		open: 8g / covered: 12g approx.					
Ambient temperature	storage	-40 to 155°C					
	operating	-40 to 85°C (higher to special order)					
Shock resistance		Functional: 10g 11mS; Destructive: 100g					
Vibration resistance		Functional: NO 20g; NC 10g 10-200Hz					
Drop resistance		1M height drop on concrete in final enclosure					

Coil Data — Table 1

Coil Voltage Code	Nominal Voltage (VDC)	Coil Resistance (Ω) ±10%	Must Operate Voltage Max. (VDC)		Allowable Voltage (VDC)*	Must release voltage min. (VDC)
			1 Form A/C/U	1 Form W		1 Form A/C/U/W
1006	6	28	3.75	4.5	8	0.7
1012	12	130	7.50	9.0	16	1.4
1024	24	520	15.00	18.0	31	2.8

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

Ordering codes



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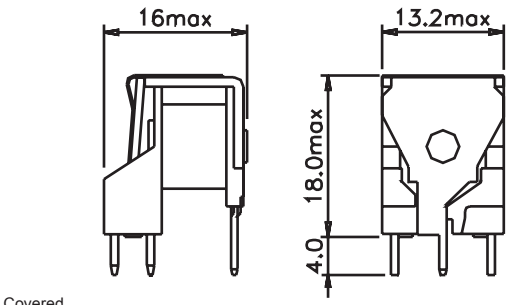
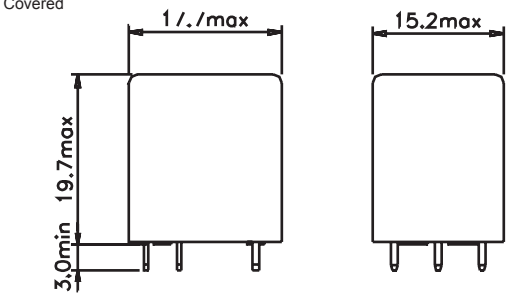
Overall Dimensions — Fig. 1

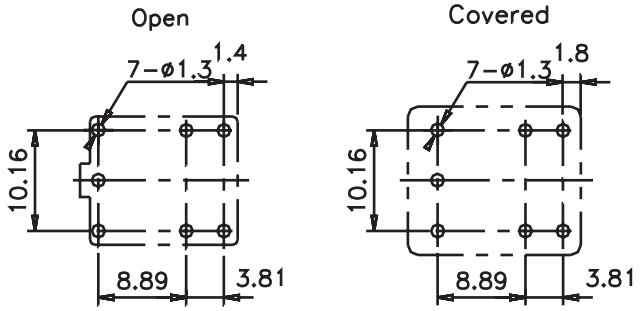
Open Frame



Covered



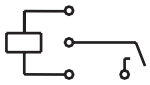
Dimensions in mm



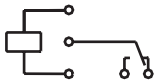
PCB Mounting Dimensions (Bottom View)

Wiring Diagrams — Fig. 2

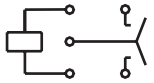
1 Form A (SPST-NO)



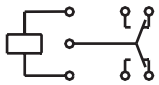
1 Form C (SPDT)



1 Form U (SPST-NO-DM)



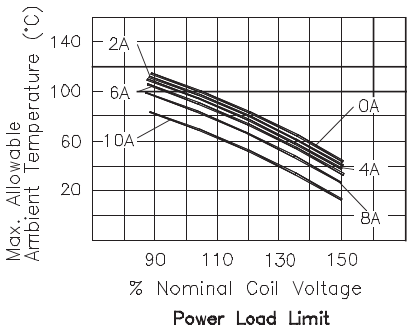
1 Form W (SPDT-DB-DM)



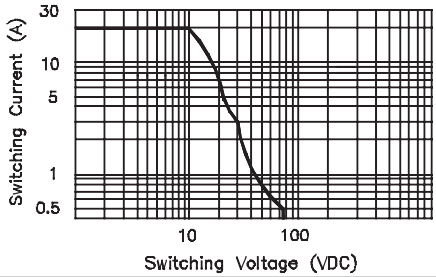
Wiring Diagrams (Bottom View)

Reference Curves — Fig. 3

Max. Allowable Ambient Temperature



Power Load Limit



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 10A, 15VDC for 1 Form A/C/U/ and 7A, 15VDC for 1 Form W, with suitable arc suppression circuit attached and with operating frequency of 1 op/sec.
3: Maximum make current refers to lamp load inrush current.
4: For optimum electrical life, please remove the knock off nib of the sealed version after cleaning process.