

DG56

automotive relays



- General purpose automotive or industrial relays
- Ideal for DC Motor Control
- Heated windows, sunroof motors, vehicle alarms
- High continuous DC current capacity
- Industry standard terminal arrangement
- PCB versions available
- RoHS Compliant

Contacts

Contact number & arrangement		SPST-NO (1 Form A), SPDT (1 Form C), SPST-NC (1 Form B)	
Contact material		AgSnOInO	
Max. switching voltage	DC	30VDC - current dependent, see curve in Fig. 1	
Contact rating		DG56A	DG56B
Max. continuous current	SPST-NO	40A	60A
	SPDT (NO/NC)	40A / 30A	60A / 30A
Max. switching current - make	SPST-NO	120A	120A
	SPDT (NO/NC)	120A / 45A	120A / 45A
Max. switching current - break	SPST-NO	40A	60A
	SPDT (NO/NC)	40A / 30A	60A / 30A
Min. switching current		100mA/6VDC	100mA/6VDC
Initial contact resistance		<100mΩ, max. at 0.1A/6VDC	

Coil

Rated voltage	DC	6, 12, 24
Must release voltage		0.10Un - see coil table 1 for more information.
Operating range of supply voltage		See coil table 1
Rated power consumption		1.6W (1.8W with resistor)

Insulation

Insulation resistance		100MΩ at 500VDC, 50%RH, 25°C
Dielectric strength.	Coil to contact	550Vrms / 1 min

General Data

Operate time	typical	7msec
Release time	typical	5msec
Electrical Life	ops	1x 10 ⁵
Mechanical life	ops	1 x 10 ⁷
Dimensions	L x W x H	26.2 x 26.2 x 23.7mm (excluding terminals) - see drawings for more information
Weight		32 - 34g approx.
Ambient temperature		-40 to 125°C
Shock resistance	Destructive	196m/s ² (20g)
	Functional	98m/s ² (10g)
Vibration resistance		1.5mm, 10 to 40Hz
Cover protection category		IP54 Dust cover, IP67 Fully sealed (optional)



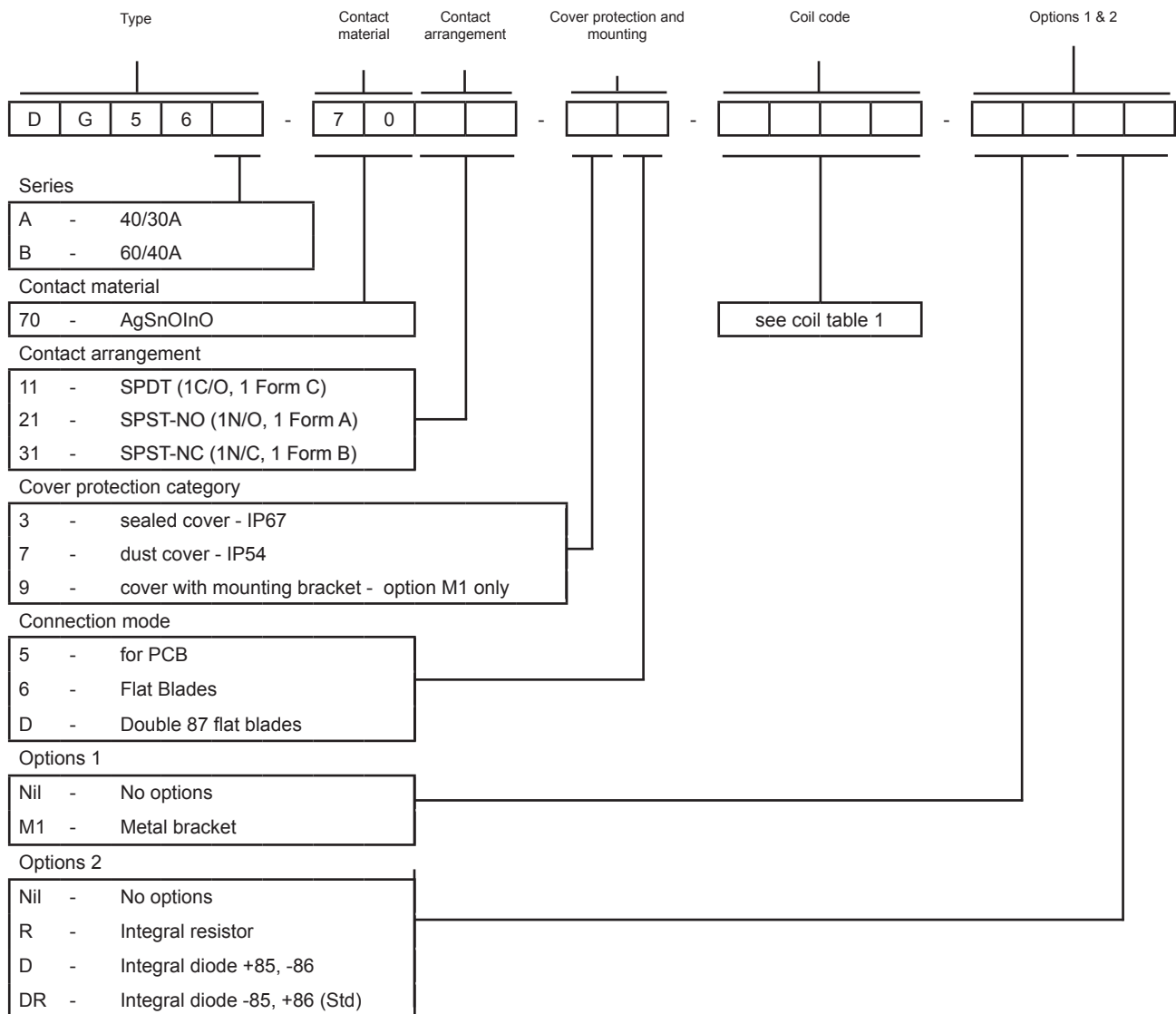
DG56 series

automotive relays

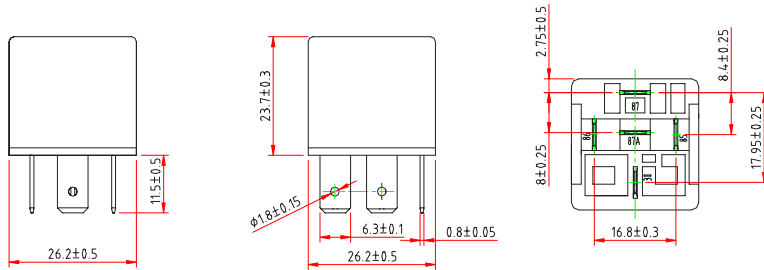


Coil data							Table 1
Coil voltage code	Nominal voltage (V DC)	Coil resistance ($\Omega \pm 10\%$)	Must operate voltage max. (V DC)	Maximum Allowable voltage (V DC)		Must release voltage min. (V DC)	Parallel Resistor ($\Omega \pm 5\%$ (when fitted))
				23 °C	85 °C		
1006	6	22	3.9	10.1	7.9	0.6	180
1012	12	85	7.8	20.2	15.7	1.2	680
1024	24	350	15.6	40.5	31.5	2.4	--
1024	24	385 (Option - R)	15.6	40.5	31.5	2.4	2700

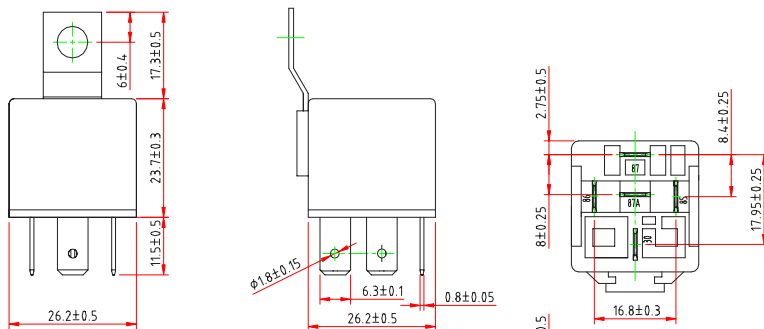
Ordering codes



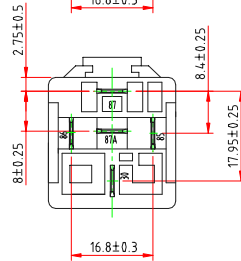
Plug - in, no bracket (DG56*-70**-76-10** Style)



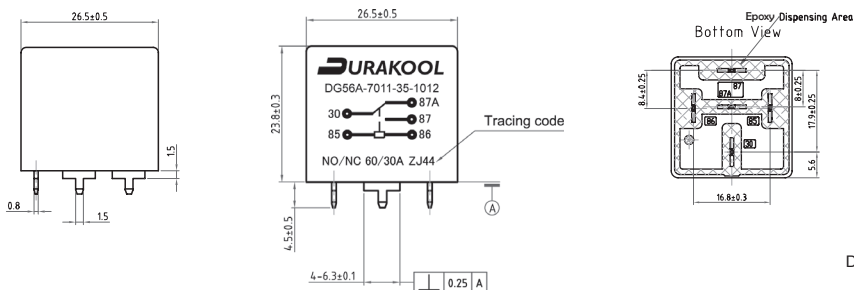
Plug - in, with metal bracket (DG56*-70**-96-10** - M1 Style)



Plug - in, with metal bracket.
Alternative position of bracket (to special order only)
Contact Factory. →



PCB Mount (DG56*-70**-75-10** or DG56*-70**-35-10** Style)



Dimensions in millimeters

Connection diagrams

