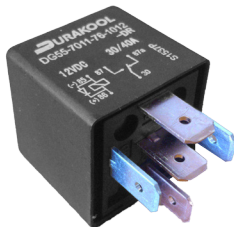


# DG55

automotive relays



- General purpose automotive or electric vehicle relays
- Ideal for Head lights, Fog lamp, Horn, Air Cooling Motor Control, Starter, Radiator Cooling, Window Control and ABS Systems
- 60A continuous DC current capacity (at 23°C)
- Industry standard terminal arrangement
- RoHS Compliant

## Contacts

Contact number & arrangement	SPST-NO (1 Form A), SPDT (1 Form C)		
Contact material	AgSnO <sub>2</sub> , AgNi 0.15		
Max. switching voltage	DC	24VDC - current dependent (see Fig. 3)	
<b>Contact rating</b>		85°C	23°C
Max. continuous current	SPST-NO	40A @ 14VDC	60A @ 14VDC
	SPDT (NO/NC)	40A / 30A	60A / 40A
Max. switching current - make	SPST-NO	120A	
	SPDT (NO/NC)	120A / 45A	
Max. switching current - break	SPST-NO	40A	
	SPDT (NO/NC)	40A / 30A	
Min. switching current	1A/5VDC (AgNi 0.15)		
Initial contact resistance	<100mΩ, max. at 0.1A/6VDC		

## Coil

Rated voltage	DC	12, 24
Must release voltage	0.10U <sub>n</sub> - see coil table 1 for more information.	
Operating range of supply voltage	See coil table 1	
Rated power consumption	1.8W with resistor	

## Insulation

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

## General Data

Operate time	typical	7msec
Release time	typical	2msec
Electrical Life	ops	1 x 10 <sup>5</sup> (40A@14VDC SPST-NO)
Mechanical life	ops	1 x 10 <sup>7</sup>
Dimensions	L x W x H	25.9 x 25.9 x 24.9mm (excluding terminals) - see drawings for more information
Weight	34g approx.	
Ambient temperature	-40 to 125°C (Operating). De-rate above 85°C. Consult factory for ambient above 85°C -40 to 155°C (Storage)	
Shock resistance	Destructive	196m/s <sup>2</sup> (20g)
	Functional	98m/s <sup>2</sup> (10g)
Vibration resistance	10 to 40Hz DA 1.27mm; 40-70Hz:5g / 70-100Hz DA 0.5mm, 100 - 500Hz:5g	
Cover protection category	IP54 Dust cover	
Flammability	Meets the requirements of UL94V-0	

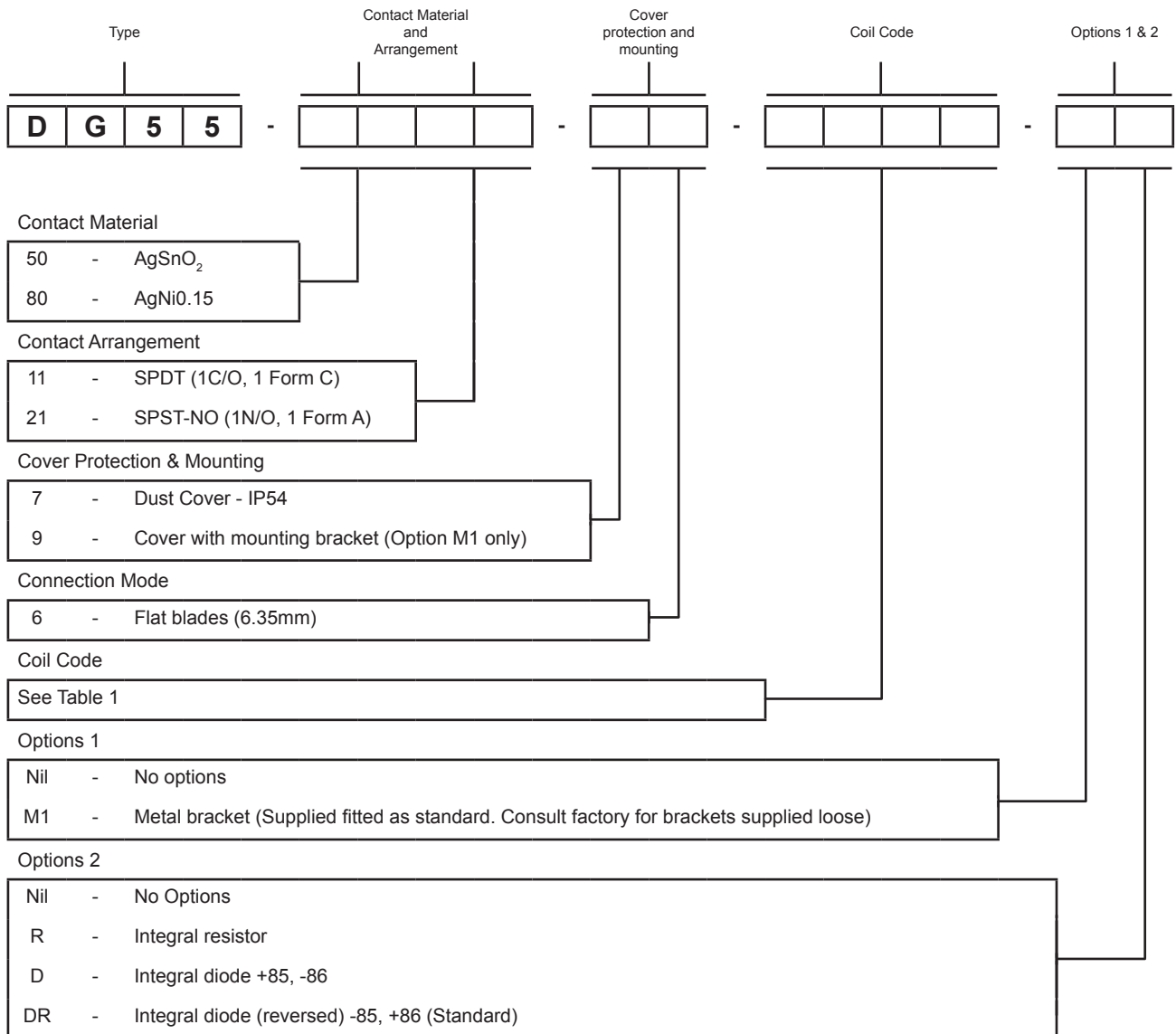
# DG55 series

automotive relays



Coil data						
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)
				23 °C	85 °C	
1012	12	72	7.2	18.0	13.0	1.2
1024	24	288	14.4	35.0	25.2	2.4

## Ordering Codes



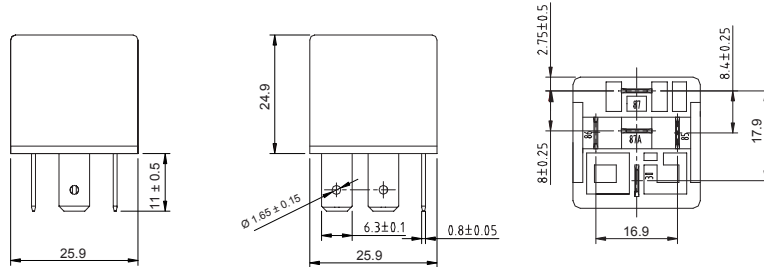
Example: DG55-5011-76-1012-DR

Note: All parameters, unless otherwise specified, are measured at ambient temperature of 23°C

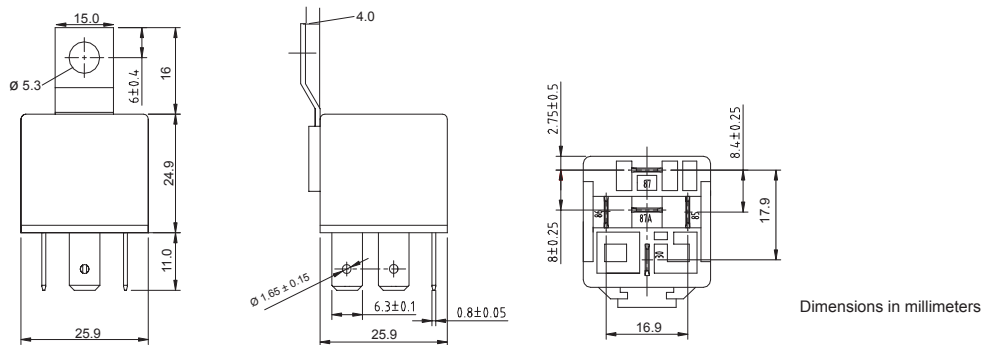
Overall Dimensions & connection diagrams

Fig. 1

Plug - in, no bracket ( DG55-50\*\*-76-10\*\* Style)

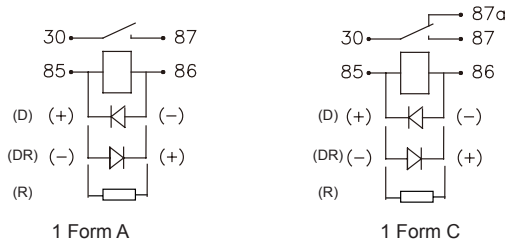


Plug - in, with metal bracket (DG55-50\*\*-96-10\*\*-M1 Style)



Connection diagrams

Fig. 2



Max. DC resistive load breaking capacity

Fig. 3

