



- General Purpose automotive or industrial relay
- Good inrush current resistance
- Ideal for DC motor control
- High continuous DC current capability
- Optimised for up to 145VDC switching
- Magnet arc blowout feature
- Industry standard terminal layout

RoHS
Compliant ✓

Contacts

Contact arrangement	SPST-NO (1 Form A)
Contact material	AgSnO ₂
Max. switching voltage	DC 145VDC
Min. switching current / voltage	100mA / 12VDC
Rated load - see Fig. 1	DC1 80A @ 12VDC, 60A @ 36VDC, 50A @ 48VDC 30A @ 72VDC, 5A @ 145VDC
Max. switching current	make 150A @ 12.8VDC (3secs)
Initial Contact resistance	<100mΩ, at 0.1A / 6VDC

Coil

Nominal voltage	DC 6 ... 60V
Must release voltage	≥0.1U _n
Operating range	See Table 1
Rated power consumption	1.6W; 1.8W with resistor

Insulation

Insulation resistance	100MΩ at 500VDC, 50%RH
Dielectric strength	coil to contact 500Vrms, 1min
	contact to contact 500Vrms, 1min

General Data

Operating time	typ. 7ms
Release time	typ. 2ms
Electrical life	ops. 1 x 10 ⁵
Mechanical life	ops. 1 x 10 ⁷

Environmental

Ambient temperature	operating	-40 to +125°C (above 85°C - consult factory)
	storage	-40 to +155°C
Shock resistance	functional	20g, 11ms
	destructive	100g
Vibration resistance		DA 1.27mm 10-40Hz / 40-70Hz:5g
		DA 0.5mm 100-500Hz: 10g
Dimensions	L x W x H	39.1 x 28 x 26mm (excluding terminals)
Weight	approx.	46g

Ordering Code

DG57CM-5021-96-1012-M3DR

Series

Contact material

50: AgSnO₂

Coil code:

See table 1

Contact arrangement

21: SPST-NO (1 N/O, 1 Form A)

Environmental protection

3: In cover, sealed - IP67

7: In cover, dust cover - IP54

9: Cover with mounting bracket slot

Connection Mode

5: PCB Terminals

6: Flat Blades

Options 1 (metal mounting bracket)

Blank: No bracket

M1: Metal mounting bracket fitted (5.3mm dia hole)

M3: Metal mounting bracket fitted (6.3mm dia hole)

Options 2 (parallel components)

Nil: No option

R: Integral resistor

D: Integral diode +85, -86 (special order)

DR: Integral diode -85, +86 (standard)

Order code examples (many other combinations possible)

DG57CM-5021-75-1012 = unsealed, pcb, no bracket

DG57CM-5021-76-1012 = unsealed, no bracket (standard)

DG57CM-5021-36-1012-R = sealed, no bracket, resistor

DG57CM-5021-36-1012-M1R = sealed, metal bracket, resistor

DG57CM-5021-96-1024 = unsealed, cover with slot, no bracket

DG57CM-5021-96-1012-M3 = unsealed, metal bracket

