DG6L Series
Miniature PCB Power Relay

- Miniature - only 28.5 x 10.1 x 12.3mm
- High switching capacity 150W, 2000VA
- High sensitivity 220mW coils

cULus E305753 ROHS Compliant

Contacts

Contact arrangement		SPST-NO (1 Form A); SPDT (1 Form C)
Contact material		Ag alloy
Max. switching voltage	AC/DC	440VAC, 125VDC
Min. breaking capacity	W	0.5W
Rated load (resistive - cos φ=1)	AC1	8A/250VAC
	DC1	5A/30VDC
Max. switching power		2000VA / 150W
Initial resistance		≤ 100mΩ, max. at 1A/24VDC

Coil

Rated voltage	DC	5...60V
Must release voltage		≥0.10Un
Operating range		See table 1
Rated power consumption	DC	See table 1 220mW & 250mW (48VDC & 60VDC)

Insulation

Insulation resistance		≥100MΩ at 500VDC, 50%RH
Dielectric strength	coil to contact	5000Vrms, 1min (50Hz)
	contact to contact	1000Vrms, 1min (50Hz)

General Data

Operating time	typ.	≤7ms
Release time	typ.	≤3ms
Electrical life	ops.	1 x 10^5
Mechanical life	ops.	1 x 10^7

Environmental

Ambient temperature	operating	-40 to +85°C
	storage	-40 to +85°C
Shock resistance	functional	10g 11ms
	destructive	100g
Vibration resistance		10-500Hz 20g/5g
Dimensions	L x W x H	28.5 x 10.1 x 12.3mm
Weight	approx.	≤8.2g

Ordering Code

D G 6 L - 2 0 1 1 - 3 5 - 1 0 1 2

Series

Coil code:
See table 1

Contact material
20: AgNi 90/10
30: $AgSnO_2$

Contact arrangement
11: SPDT (1C/O) (3.2mm pitch)
21: SPST-NO (1N/O) (5mm pitch)

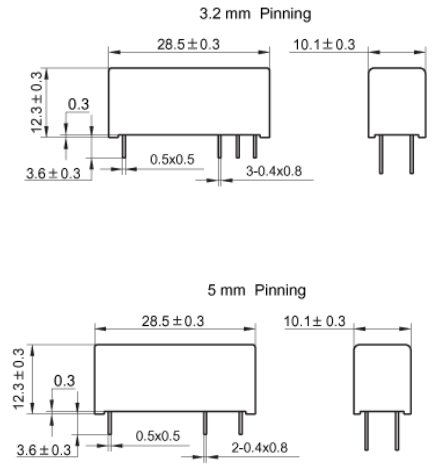
Environmental protection
2: In cover - IP40
3: In cover, sealed - IP67

Mounting & terminations
5: For PCB

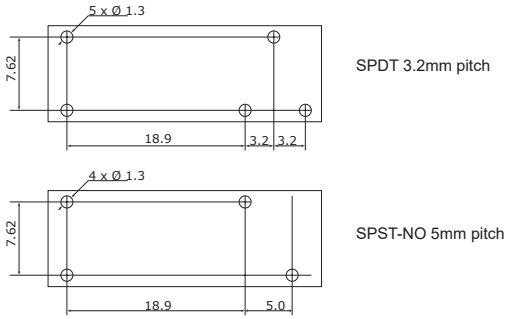
Coil Data (at 20°C) — Table 1

Coil code	Nominal voltage (VDC)	Coil resistance (Ω) ±10%	Power consumption (mW)	Must 0perate voltage max. (VDC)	Must release voltage min. (VDC)	Max. allowable voltage (VDC)
1005	5	113	220	3.75	0.50	11.8
1006	6	164	220	4.50	0.60	14.1
1012	12	620	220	9.0	1.20	28.2
1018	18	1295	220	13.5	1.80	42.3
1024	24	2350	220	18.0	2.40	56.4
1048	48	9600	250	36.0	4.80	112.8
1060	60	12500	250	45.0	6.00	141.0

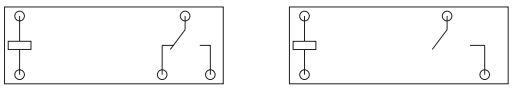
Dimensions mm — Fig. 1



PCB Mounting Dimensions mm (bottom view) — Fig. 2



Wiring Diagrams — Fig. 3



Reference Curves — Fig. 4