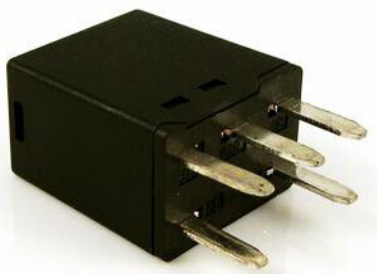


DG91

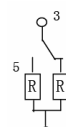
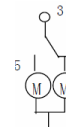
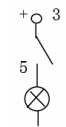
micro 280 automotive relay

DURAKOOL



- Industry Standard micro 280 relay
- Up to 120A 12VDC inrush capability
- 2.8mm QC terminals
- -40° to 125°C
- RoHS & ELV Compliant

Contacts

Contact number & arrangement				SPST-NO (1 Form A); SPDT (1 Form C)				
Contact material				AgSnOInO				
Max. switching voltage				DC	27VDC			
Rated load (max. continuous current)				DC1	30A/12VDC (Normally open); 20A/12VDC (Normally closed)			
Load Voltage VDC	Load Type		Max/Rated Current			On/Off Ratio	Diagram	
			SPDT		SPST-NO			
			NO	NC	NO			
13.5	Resistive On/Off		30	20	30	2s/2s	1	 Diagram 1  Diagram 2  Diagram 3
	Motor	On	40	20	40		2	
		Off	20	10	20			
	Lamp	On	100	-	120		3	
		Off	20	-	20			
27	Resistive On/Off		20	10	20		1	
Minimum load				0.5A/12VDC				
Initial resistance				50mΩ, max. at 0.1A/24VDC				
Coil								
Rated voltage				DC	12 & 24V - see coil details - Table 1			
Rated power consumption				DC	Approx. 1.5W SPDT; 1.7W with resistor			
Insulation								
Insulation resistance				100MΩ at 500VDC, 50%RH				
Dielectric strength				coil to contact	550Vrms, 1min			
				contact to contact	550Vrms, 1min			
General Data								
Operating time (typical)				ms	5 (10ms max.)			
Release time (typical)				ms	5 (10ms max.)			
Electrical Life ²				ops	1 x 10 ⁵			
Mechanical life				ops	1 x 10 ⁷			
Dimensions				L x W x H	23.0 x 15.5 x 26.0 mm (excluding terminals)			
Weight				20g approx.				
Ambient temperature				storage	-40 to 155°C			
				operating	-40 to 125°C			
Shock resistance				Functional: 20g 11ms (196m/s ²) Destructive: 100g				
Vibration resistance				10Hz - 500Hz 49m/s ² (5g)				

DG91

micro 280 automotive relay



Coil Data

Table 1

Coil Voltage Code	Nominal Voltage (VDC)	Coil Resistance (Ω) $\pm 10\%$	Must Operate Voltage Max. (VDC)	Must Release Voltage min. (VDC)	Parallel Resistor (optional) (Ω)	Equivalent Resistance (Ω)	Power (W) Resistor/ No Resistor	Max. allowable Overdrive (VDC)	
								23°C	85°C
1012	12	98	7.2	1.2	680	85.7	1.5 / 1.7	20	15
1024	24	385	14.4	2.4	2700	337	1.5 / 1.7	40	30

Ordering codes

Type	Contact material	Contact arrangement	Cover protection and mounting	Coil code	Options
D G 9 1	7 0				
Contact material 70 - AgSnInO Contact arrangement 11 - SPDT (1 C/O, 1 Form C) 21 - SPST-NO (1N/O, 1 Form A) Cover protection category 3 - in cover, sealed - IP67 7 - in cover, dust cover - IP54 Connection mode 6 - Flat Blades 2.8mm QC's Options Nil - No option R - Resistor (see Table 1 for values) D - Diode (+85 / -86) DR - Diode reversed (-85 / + 86) - standard BD - Bidirectional diode					

See Table 1

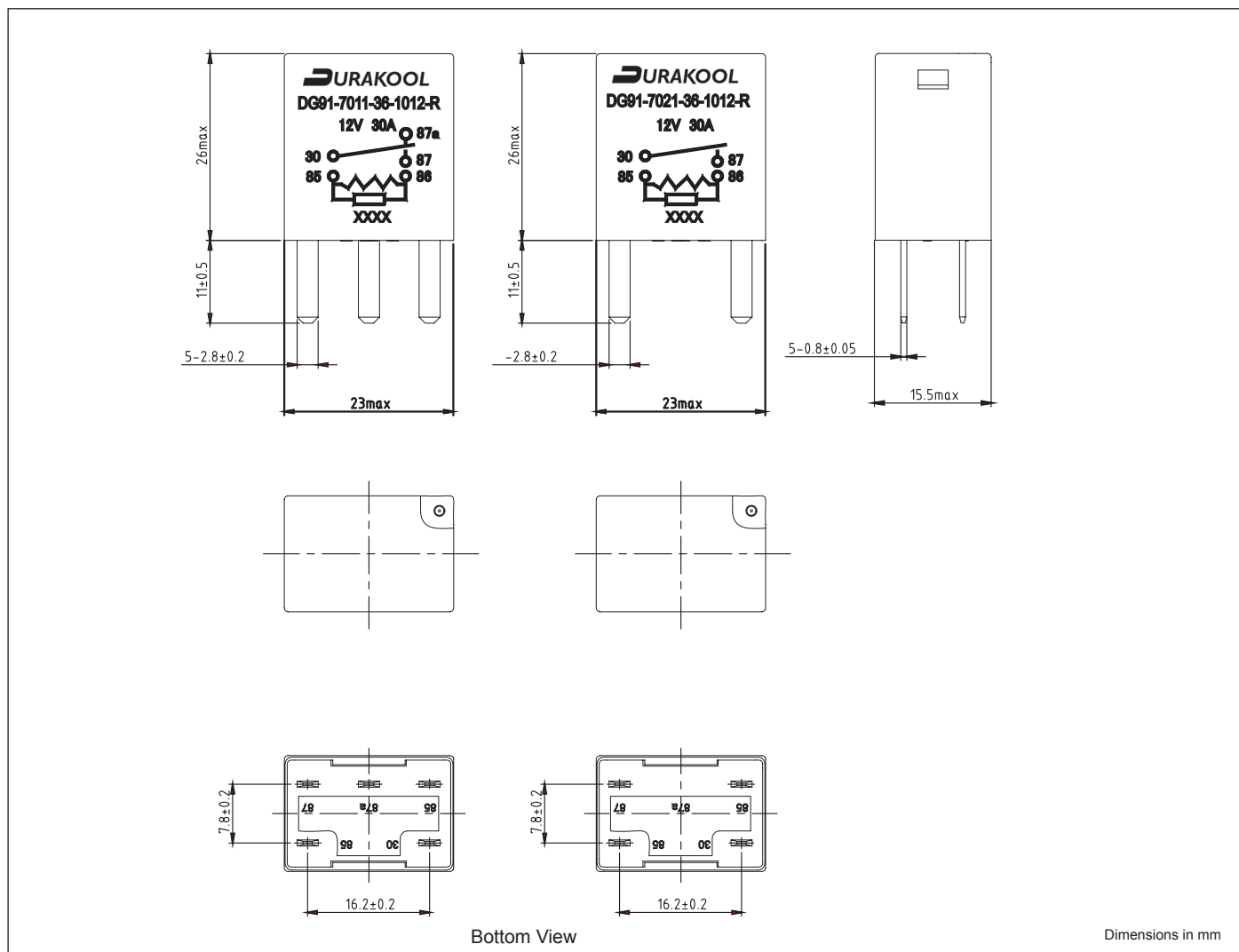
DG91

micro 280 automotive relay

DURAKOOL

Overall Dimensions

Fig. 1



Wiring Diagrams

Fig. 2



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 40A, 15VDC with suitable arc suppression circuit attached and with operating frequency of 1 op/sec.
- 3: Maximum make current refers to lamp load inrush current.