



- Ultra miniature
- Extremely light weight
- Single and twin relays
- Ultra Low voltage operate version
- Reflow solder compatible version

				ROHS Compliant
Contacts			Ordering Code	
Contact arrangement		SPDT (1 Form C); 2 x SPDT (2 x 1 Form C)		
Contact material		AgSnO <sub>2</sub>	D G 6 0 - 3 0 2 2 - 3 5	- S 0 1 2
Max. switching voltage	DC	16VDC (consult factory for 24VDC)		
Min. switching current / voltage		1A/6VDC	Series	Coil code:
Rated load	DC1	25A/14VDC		See tables
Max. switching current	DC1	30A	Contact material	1 or 2
Max. continuous current	DC1	25A (1hr @20°C)	30: AgSnO <sub>2</sub>	
Max. switching power		480W		
Initial contact resistance		≤100mΩ, max. at 0.1A, 6VDC	Contact arrangement	
Coil			11: SPDT (1 x C/O, 1 Form C)	
Rated voltage	DC	12V	22: 2 x SPDT ( 2 x 1C/O)	
Must release voltage	DC	1.0V		
Operating range		See Tables 1 & 2	Environmental protection	
Rated power consumption	DC	0.64W (table 1) / 0.8W (table 2)	2: In cover, flux tight - IP40	
Insulation			- for reflow see note 3	
Insulation resistance		100MΩ at 500VDC, 50%RH	3: In cover, sealed - IP67	
Coil insulation		UL Class F: standard; UL Class H: reflow compatible		
Dielectric strength	coil to contact	1000Vrms, 50Hz, 1min	Mounting & terminations	
	contact to contact	500Vrms, 50Hz, 1min	5: PCB Mounting	
General Data				
Operating time	typ.	≤10ms	Coil codes	
Release time	typ.	≤5ms	S012: 12VDC Standard coil	
Electrical Life <sup>2</sup>	ops.	1 x 10 <sup>5</sup>	HS12: 12VDC Standard coil for reflow	
Mechanical life	ops.	1 x 10 <sup>6</sup> at 300 ops/min	L012: 12VDC Low operate voltage coil	
Environmental		HL12: 12VDC Low operate voltage coil for reflow		
Ambient temperature	operating	-40 to +85°C (-40 to 105°C Reflow - See note 3)		
	storage	-40 to +155°C		
Shock resistance		98m/s² 11ms		
Vibration resistance		43.1 m/s² 10 - 500Hz		
Dimensions	L x W x H	14.3x7.5x13.8mm-SPDT;14.3x15.7x13.8mm-2xSPDT		
Weight	approx.	4g approx. (SPDT); 8g approx. (2 x SPDT)		

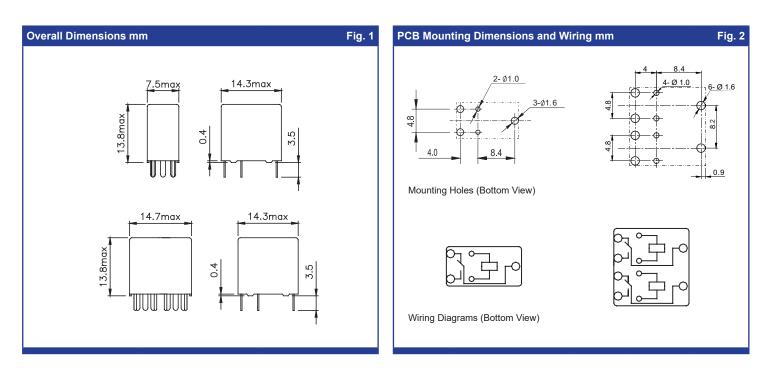
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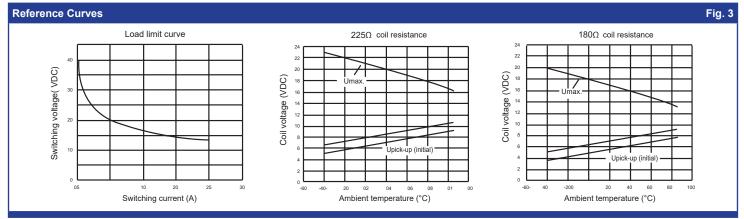


## DG60 Series Ultra Miniature Automotive PCB Relay

Coil Data (640m/W - standard version) Table 1							
Coil code	Nominal voltage (VDC)	Coil Resistance (Ω) ±10%	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Max. allowable voltage at 20°C (VDC)		
S012	12	225	7.2	1.0	20		
HS12	12	225	7.2	1.0	20		

Coil Data (800m/W - low operate voltage version) Table 2							
Coil code	Nominal voltage (VDC)	Coil Resistance (Ω) ±10%	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Max. allowable voltage at 20°C (VDC)		
L012	12	180	6.5	1.0	18		
HL12	12	180	6.5	1.0	18		





## Notes:

- 1: All parameters, unless otherwise specified, are measured at ambient temperature of 23°C.
- 2: Electrical life is strongly dependent on switching frequency, On/Off ratio and environmental conditions.
- 3: Reflow compatible plastics only available in flux tight version and with Class H coil insulation. Consult factory before ordering.