

### NOT FOR NEW DESIGNS



- Miniature pcb power relay
- Up to 16A /30VDC or 250VAC Rating
- Industry standard style
- 200mW or 450mW Coil options



ROHS  
Compliant ✓

#### Contacts

Contact arrangement	SPST-NO (1 Form A)	
Contact material	AgSnO <sub>2</sub> , AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub> *	
Max. switching voltage	AC/DC	250VAC / 30VDC
Min. switching current / voltage	100mA/12VDC	
Max. switching power	2500VA / 300W: 4000VA / 480W	
Rated load	AC1	10A / 250VAC, 16A / 250VAC (AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub> )*
	DC1	10A / 30VDC, 16A / 30VDC (AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub> )*
Initial resistance	≤ 50mΩ, max. at 0.1A/6VDC	

#### Coil

Rated voltage	DC	3...24V (3V not UL approved)
Must release voltage	≥ 0.1Un	
Operating range	See tables 1 & 2	
Rated power consumption	DC	200mW (Sensitive Coil) / 450mW (Standard Coil)

#### Insulation

Insulation resistance	1000MΩ at 500VDC, 50%RH	
Tracking resistance	CTI	250
Dielectric strength	10A: coil to contact	4000Vrms 50/60Hz, 1min
	16A: coil to contact	3600Vrms 50/60Hz, 1min
Surge resistance	contact to contact	1000Vrms 50/60Hz, 1min
	coil to contact	10,000V / 1.2x50 μs

#### General Data

Operating time (excluding bounce)	typ.	≤ 6ms (200mW Coil), ≤ 10ms (450mW Coil)
Release time (excluding bounce)	typ.	≤ 5ms
Electrical life	10A ops.	≥ 1 x 10 <sup>5</sup> (resistive), max. 30 ops. per minute
	16A ops.	≥ 5 x 10 <sup>4</sup> (resistive), max. 6 ops. per minute
Mechanical life	ops.	≥ 1 x 10 <sup>7</sup> (no load), max. 300 ops. per minute

#### Environmental

Ambient temperature	operating / storage	-40 to +85°C
Shock resistance	functional / destructive	10g / 100g
Vibration resistance	DA 1.5mm 10-55Hz	
Flammability class	UL	94V-0
Dimensions	L x W x H	18.3 x 10.2 x 15.2mm
Weight	approx.	~7g

#### Ordering Code

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

##### Series

##### Contact material

30: AgSnO<sub>2</sub> (10A)

70: AgSnO<sub>2</sub>In<sub>2</sub>O<sub>3</sub> (16A)\*

##### Contact arrangement

21: SPST-NO (1 N/O)

##### Environmental protection IP67

3: In cover, sealed

##### Mounting & terminations

5: For PCB

\*NB: UL Pending on 16A variant

##### Coil code:

See tables

1 & 2

Coil Data (450mW)						Table 1
Coil code	Nominal voltage (VDC)	Coil resistance (Ω) ±10%	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Allowable voltage (VDC)	
1003 <sup>1</sup>	3	20	2.25	0.30	3.9	
1005	5	55	3.75	0.50	6.5	
1006	6	80	4.50	0.60	7.8	
1009	9	180	6.75	0.90	11.7	
1012	12	320	9.00	1.20	15.6	
1024	24	1280	18.00	2.40	31.2	

<sup>1</sup> 3VDC Coil not UL approved.

Coil Data (200mW)						Table 2
Coil code	Nominal voltage (VDC)	Coil resistance (Ω) ±10%	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Allowable voltage (VDC)	
S003 <sup>1</sup>	3	45	2.25	0.30	3.9	
S005	5	125	3.75	0.50	6.5	
S006	6	180	4.50	0.60	7.8	
S009	9	400	6.75	0.90	11.7	
S012	12	720	9.00	1.20	15.6	
S024	24	2800	18.00	2.40	31.2	

<sup>1</sup> 3VDC Coil not UL approved.

