







#### Features

- High sensitivity
- Super light weight
- Low coil power consumption
- PC board mounting
- Ideal for high density mounting

### Contact Data\*

Contact Arrangement	1A = SPST N.O.			
	1B = SPST N.C.			
	1C = SPDT			
Contact Resistance	< 50 milliohms initial			
Contact Material	AgNi + Au, Ag + Au			
Maximum Switching Power	150W			
Maximum Switching Voltage	300VAC, 150VDC			
Maximum Switching Current	5A			

Contact Rating					
AgNi	3A & 5A @125VAC, general use, 20k cycles for N.O., 10k cycles for N.C.				
	3A & 5A @ 30VDC, resistive use, 50k cycles for N.O., 30k cycles for N.C.				
Ag	1A & 3A @125VAC, general use				
	1A & 3A @ 30VDC, resistive use				
	Pilot Duty 270VA, 120VAC, N.O., 30k cycles				
	Pilot Duty 270VA, 120VAC, N.C., 6k cycles				

## Coil Data\*

Coil Voltage VDC		Coil Resistance Ω +/- 10%			Pick Up Voltage VDC (max) 75% of rated	Release Voltage VDC (min) 10% of rated	Coil Power W	Operate Time ms	Release Time ms
Rated	Max	.20W	.36W	.45W	voltago	voltage			
3	3.9	45	25	20	2.25	.3	.20 .36 .45	5	5
5	6.5	125	75	56	3.75	.5			
6	7.8	180	100	80	4.50	.6			
9	11.7	405	225	180	6.75	.9			
12	15.6	720	400	320	9.00	1.2			
24	31.2	2880	1600	1280	18.00	2.4			

### General Data\*

Electrical Life @ rated load	100K cycles, average		
Mechanical Life	10M cycles, average		
Insulation Resistance	100M Ω min. @ 500VDC initial		
Dielectric Strength, Coil to Contact	1250V rms min. @ sea level initial		
Contact to Contact	500V rms min. @ sea level initial		
Shock Resistance	100m/s <sup>2</sup> for 11 ms		
Vibration Resistance	1.50mm double amplitude 10~40Hz		
Terminal (Copper Alloy) Strength	5N		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-40°C to +155°C		
Solderability	260°C for 5 s		
Weight	3.5g		

\* Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.



#### **Ordering Information**

1. Series	J102	1C	S	3	12VDC	.45
J102 J102K						
2. Contact Arrangem 1A = SPST N.O. 1B = SPST N.C. 1C = SPDT	nent					
3. Sealing Options S = Sealed						
4. Contact Options 1 = 1amp Ag (requ 3 = 3amp AgNi (re 3P = 3amp Ag (rec 5 = 5amp AgNi (re	ires .2, .36 or .45 wa quires .2, .36 or .45 quires .2, .36 or .45 w quires .45 watt coil)	tt coil) watt coil) ⁄att coil)				
5. Coil Voltage 3VDC 5VDC 6VDC 9VDC 12VDC 24VDC						
6. Coil Power .20 = .20W .36 = .36W .45 = .45W						

#### Dimensions

Units = mm





# Schematics & PC Layouts

**Bottom Views** 

J102

