





E197851 20.4 x 10.05 x 11.0 mm

#### **Features**

- High sensitivity
- Low cost
- Conforms to FCC part 68
- Clearance more than 1.2mm between coil and contacts
- Creepage more than 1.9mm between coil and contacts
- Bifurcated contacts for high reliability

### Contact Data\*

Contact Arrangement	2C = DPDT Bifurcated Contacts		
Contact Rating	2A @ 24VDC, Resistive		
	1A @ 120VAC, Resistive		
Contact Material	AgNi + Au Clad		
Contact Resistance	≤ 50 milliohms initial		

Maximum Switching Power	48W, 120VA		
Maximum Switching Voltage	250VAC, 100VDC		
Maximum Switching Current	2A		

# Coil Data\*

Coil Voltage VDC		Coil Resistance Ω +/- 10%				Pick Up Voltage VDC (max)	Release Voltage VDC (min)	Coil Power W	Operate Time ms	Release Time ms
Rated	Max	.15W	.20W	.36W	.45W	75% of rated voltage	10% of rated voltage			
3	3.9	60	45	25	20	2.25	0.3	.15 .20 .36 .45	6	4
5	6.5	167	125	70	56	3.75	0.5			
6	7.8	240	180	100	80	4.50	0.6			
9	11.7	540	405	225	180	6.75	0.9			
12	15.6	960	720	400	320	9.00	1.2			
24	31.2	3840	2880	1600	1280	18.00	2.4			
48	62.4	n/a	11520	6400	5100	36.00	4.8			

## 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	1000V 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	1.5mm double amplitude 10~40Hz		
Terminal (Copper Alloy) Strength	5N		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-40°C to +85°C		
Solderability	260°C for 5 s		
Weight	5g		

<sup>\*</sup> 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

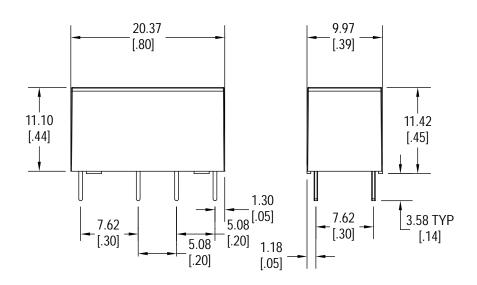


# **Ordering Information**

1. Series	J104D	2C	12VDC	.45	S
J104D					
Contact Arrangement     C = DPDT					
3. Coil Voltage 3VDC 5VDC 6VDC 9VDC 12VDC 24VDC 48VDC **Not available with .15W coil power					
4. Coil Power .15 = .15W .20 = .20W .36 = .36W .45 = .45W					
5. Seal S = Sealed (standard)					

# **Dimensions**

### Units = mm



# Schematic & PC Layout

### **Bottom View**

