

## Features

- Switching capacity up to 20A; small size and light weight
- Low coil power consumption; high contact load
- Strong resistance to shock and vibration

**cUL**<sup>®</sup>  
E197852



## Contact Data\*

Contact Arrangement	1A, 1B, 1C = SPST N.O., SPST N.C., SPDT 2A, 2B, 2C = DPST N.O., DPST N.C., DPDT	Contact Resistance	< 50 milliohms initial
Contact Rating	1 Pole : 20A @ 277VAC & 28VDC, General Purpose 2 Pole : 12A @ 250VAC & 28VDC, General Purpose	Contact Material	AgCdO
	2 Pole : 10A @ 277VAC, General Purpose	Max Switching Power	5540VA, 560W
	1/2hp @ 125VAC	Max Switching Voltage	300VAC
		Max Switching Current	20A

## Coil Data DC Parameters\*

Coil Voltage VDC		Coil Resistance $\Omega$ +/- 10%	Pick Up Voltage VDC (max) 75% of rated voltage	Release Voltage VDC (min) 10% of rated voltage	Coil Power W	Operate Time ms	Release Time ms
Rated	Max						
12	15.6	160	9.0	1.2	.9	25	25
24	31.2	650	18.0	2.4			
36	46.8	1500	27.0	3.6			
48	62.4	2600	36.0	4.8			
110	143.0	11000	82.5	11.0			
220	286.0	53778	165.0	22.0			

## Coil Data AC Parameters\*

Coil Voltage VAC		Coil Resistance $\Omega$ +/- 10%	Pick Up Voltage VAC (max) 80% of rated voltage	Release Voltage VAC (min) 30% of rated voltage	Coil Power VA	Operate Time ms	Release Time ms
Rated	Max						
12	15.6	46	9.6	3.6	1.2	25	25
24	31.2	184	19.2	7.2			
36	46.8	370	28.8	10.8			
48	62.4	735	38.4	14.4			
110	143.0	3900	88.0	33.0			
120	132.0	4550	96.0	36.0			
220	286.0	14400	176.0	66.0			
240	312.0	19000	192.0	72.0			

## General Data\*

Electrical Life @ rated load	100K cycles, average	
Mechanical Life	20M cycles (1 & 2 pole), typical; 10M cycles (3 & 4 pole), average	
Insulation Resistance	100M $\Omega$ min. @ 500VDC initial	
Dielectric Strength	Coil to Contact	1500V rms min. @ sea level initial
	Contact to Contact	1500V rms min. @ sea level initial
Shock Resistance	100m/s <sup>2</sup> for 11 ms	
Vibration Resistance	1.27mm double amplitude 10~40Hz	
Terminal (Copper Alloy) Strength	10N	
Operating Temperature	-40°C to +85°C	
Storage Temperature	-40°C to +155°C	
Solderability	260°C for 5 s	
Weight	2C: 40g; 3C: 50g; 4C: 60g	

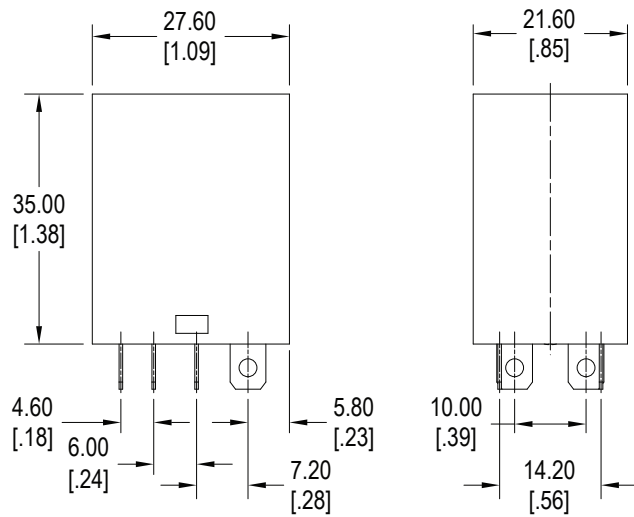
## Ordering Information

1. Series	J151	2C	T	12VDC	.9
J151					
2. Contact Arrangement	1A, 1B, 1C 2A, 2B, 2C				
3. Termination	T = Solder lugs / Plug-in F = Solder lugs / Plug-in with Flange P = PCB Terminals				
4. Coil Voltage	12VDC    12VAC    110VAC 24VDC    24VAC    120VAC 36VDC    36VAC    220VAC 48VDC    48VAC    240VAC 110VDC 220VDC				
5. Coil Power	.9 = .9W (For use with DC coil only) 1.2 = 1.2VA (For use with AC coil only)				
6. Option LED	Blank = No indicator LED D = With indicator LED				
7. Gold Option	Blank = Standard contact G = Gold over standard contacts				
8. Push to Test Option	Blank = Without push to test button T = With push to test button				

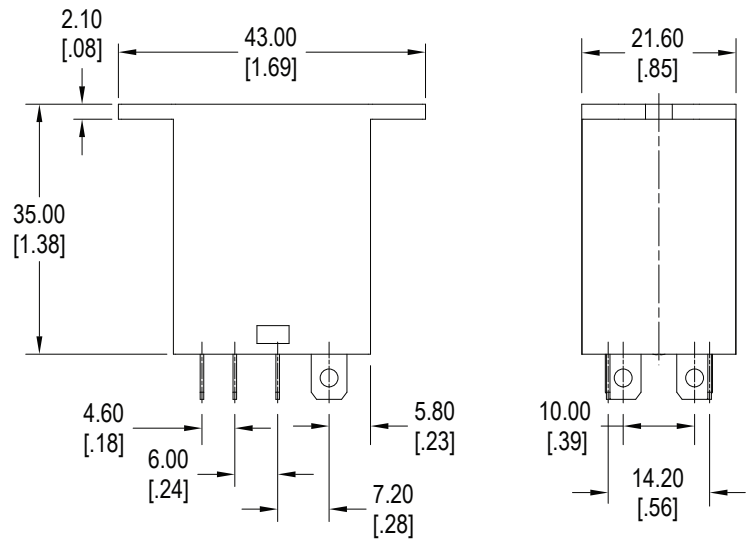
\* Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application.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

## Dimensions

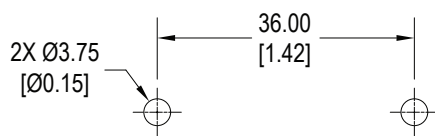
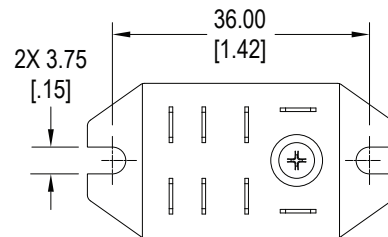
Units = mm



1 & 2 Pole

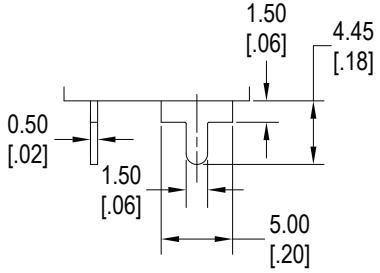


1 & 2 Pole with Flange

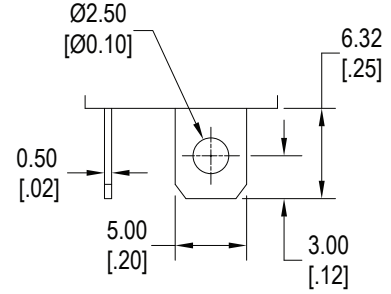


Flange Mount Layouts

## Termination Options

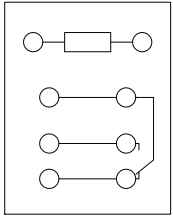


PC Pin

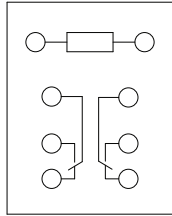


Solder Lug

## Schematics & PC Layouts



1C



2C

