

CIT Relay & Switch

J151

21.6 x 27.6 x 35.0 mm

Features

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

c UL us
E197852

RoHS COMPLIANT

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 Rating	1 Pole : 20A @ 277VAC & 28VDC, General Purpose 2 Pole : 12A @ 250VAC & 28VDC, General Purpose 2 Pole : 10A @ 277VAC, General Purpose 1/2hp @ 125VAC

Contact Resistance	< 50 milliohms initial
Contact Material	AgCdO
Max Switching Power	5540VA, 560W
Max Switching Voltage	300VAC
Max Switching Current	20A

Coil Data DC Parameters*

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		80% of rated voltage	10% of rated voltage			
12	15.6	160	9.6	1.2	.9	25	25
24	31.2	650	19.2	2.4			
36	46.8	1500	28.8	3.6			
48	62.4	2600	38.4	4.8			
110	143.0	11000	88.0	11.0			
220	286.0	53778	176.0	22.0			

Coil Data AC Parameters*

Coil Voltage VAC		Coil Resistance Ω +/- 10%	Pick Up Voltage VAC (max)	Release Voltage VAC (min)	Coil Power VA	Operate Time ms	Release Time ms
Rated	Max		80% of rated voltage	30% of rated voltage			
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			

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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 Ω 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^2 for 11 ms
Vibration Resistance		1.27mm double amplitude 10~40Hz
Terminal (Copper Alloy) Strength		10N
Operating Temperature		-40^{o}C to +85^{o}C
Storage Temperature		-40^{o}C to +155^{o}C
Solderability		260^{o}C for 5 s
Weight		2C: 40g; 3C: 50g; 4C: 60g

Ordering Information

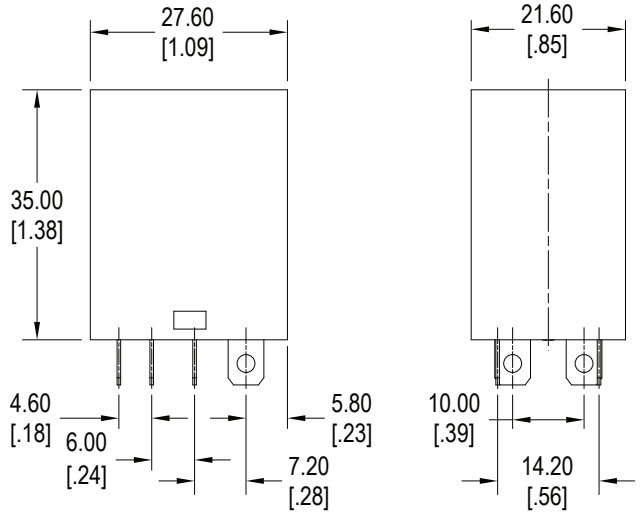
1. Series	J151	2C	T	12VDC	.9		
J151							
2. Contact Arrangement 1A, 1B, 1C 2A, 2B, 2C							
3. Termination T = Solder lugs / Plug-in F = Solder lugs / Plug-in with Flange P = PCB Terminals							
4. Coil Voltage 12VDC 24VDC 36VDC 48VDC 110VDC 220VDC	12VAC 24VAC 36VAC 48VAC	110VAC 120VAC 220VAC 240VAC					
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.*

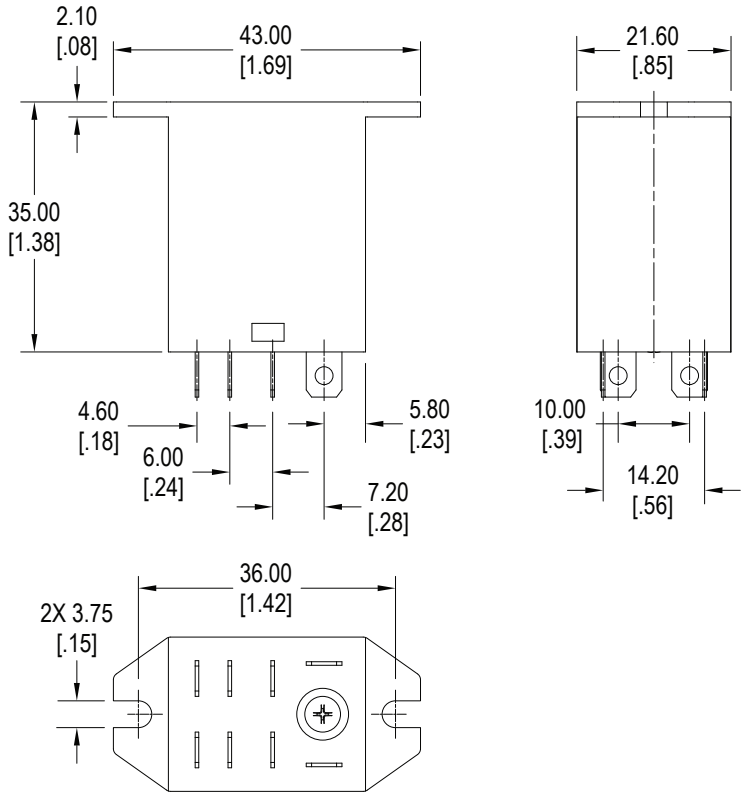
Dimensions

Units = mm

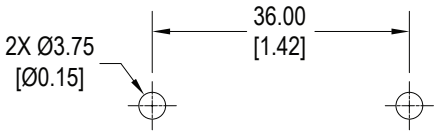
1 & 2 Pole



1 & 2 Pole with Flange

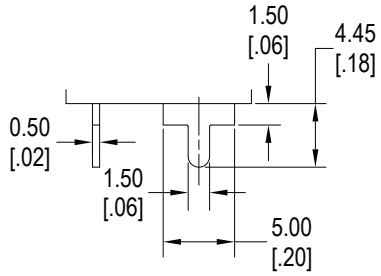


Flange Mount Layouts

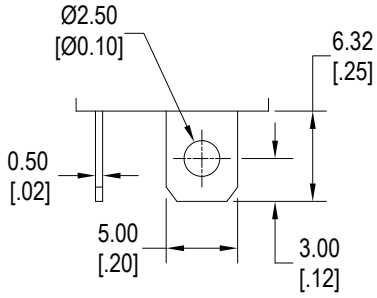


Termination Options

PC Pin

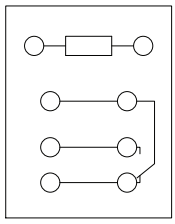


Solder Lug

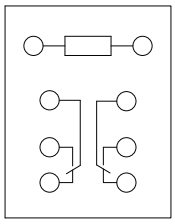


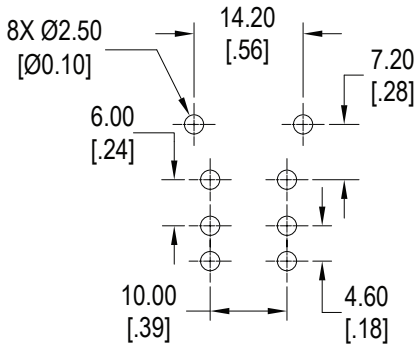
Schematics & PC Layouts

1C



2C

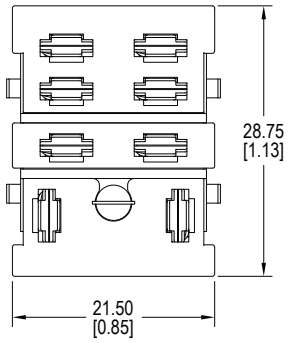


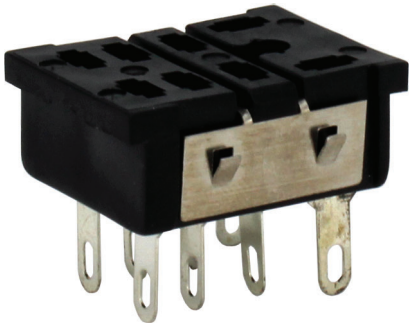


Sockets

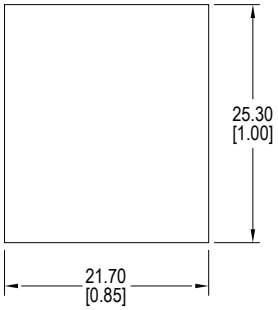
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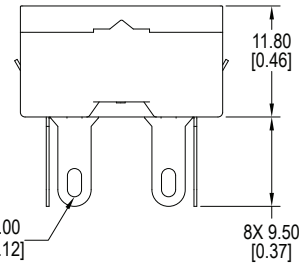
RS151A

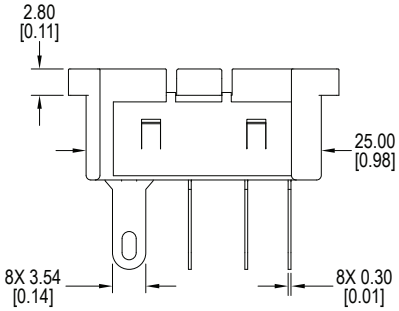




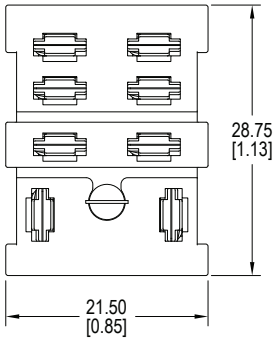
Suggested Panel Cutout

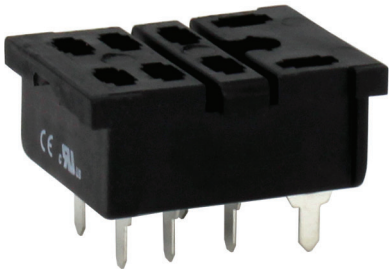






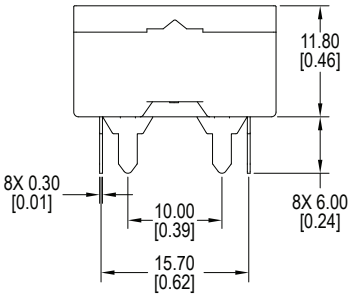
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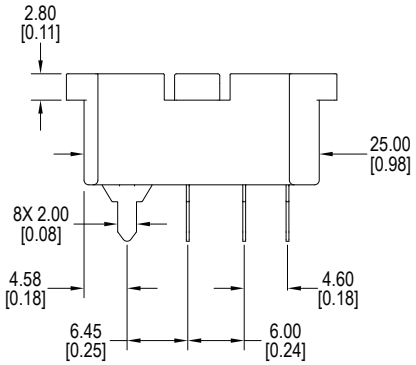


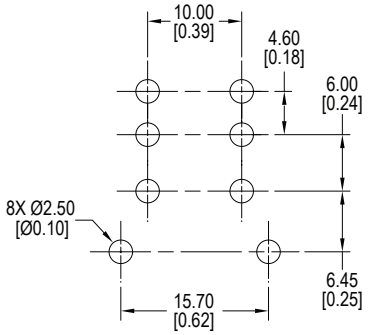


Suggested PC Layout

Top View



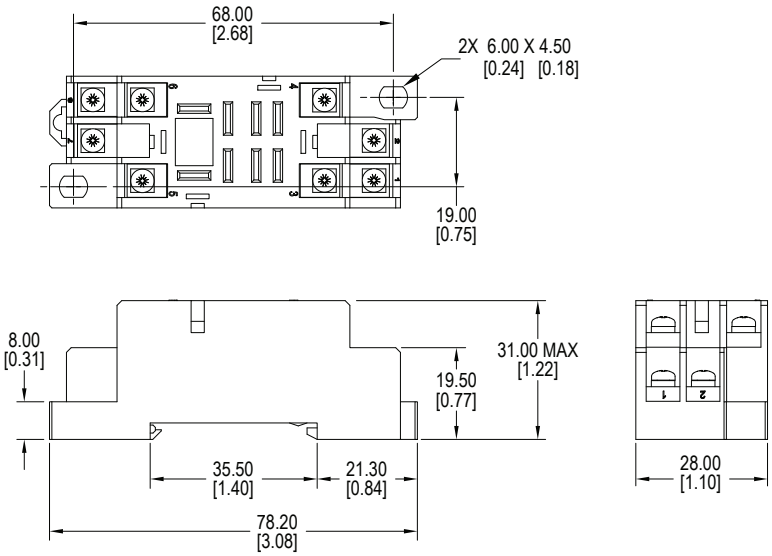




Sockets

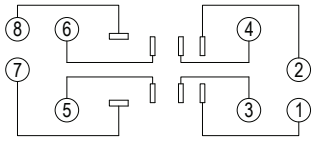
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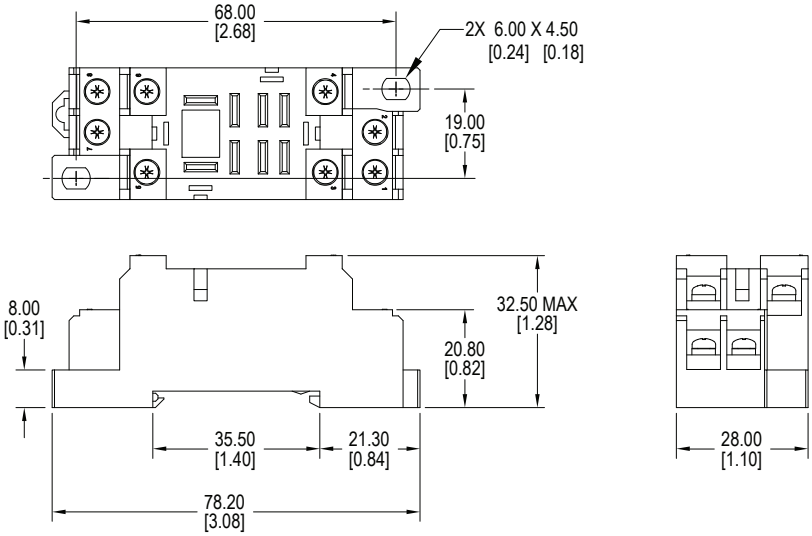




Schematic

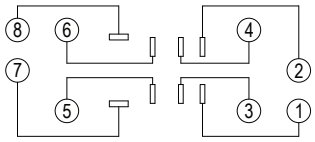


RS151D





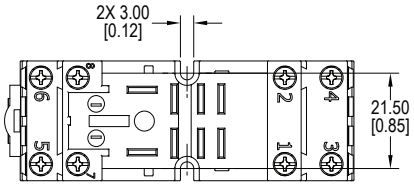
Schematic

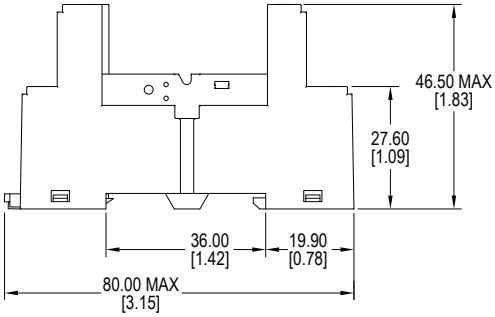


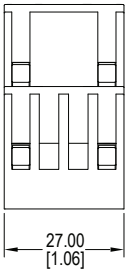
Sockets

Units = mm [in]

RS151E









Schematic

