CIT Relay & Switch

J109F

22.3 x 17.3 x 14.5 mm

Features

- UL F class rated standard
- Small size and light weight
- PC board mounting
- UL/CUL certified

c UL us
E197851

RoHS COMPLIANT

Contact Data*

Contact Arrangement	1A = SPST N.O. 1B = SPST N.C. 1C = SPDT
Contact Rating 10A contact	6A @ 28VDC & 300VAC resistive
	10A @ 28VDC & 125VAC gen purpose
	10A @ 240VAC resistive
12A contact	12A @ 28VDC & 125VAC gen purpose 1/3hp - 120/240VAC

Contact Resistance	< 50 milliohms initial
Contact Material	$AgSnO_2$
Maximum Switching Power	336W
Maximum Switching Voltage	380VAC, 110VDC
Maximum Switching Current	20A

Coil Data*

Coil Voltage VDC		Coil Resistance Ω +/- 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	.36W	.45W	.50W	.80W					
5	6.5	70	56	50	31	3.75	.5	.36 .45 .50 .80	7	4
9	11.7	225	180	162	101	6.75	.9			
12	15.6	400	320	288	180	9.00	1.2			
24	31.2	1600	1280	1152	720	18.00	2.4			
48	62.4	6400	5120	4608	2880	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	2500V rms min. @ sea level initial
Contact to Contact	1000V rms min. @ sea level initial
Shock Resistance	100m/s^2 for 11 ms
Vibration Resistance	1.50mm double amplitude 10~40Hz
Terminal (Copper Alloy) Strength	10N
Operating Temperature	-55ºC to +125ºC
Storage Temperature	-55ºC to +155ºC
Solderability	260ºC for 5 s
Weight	11g

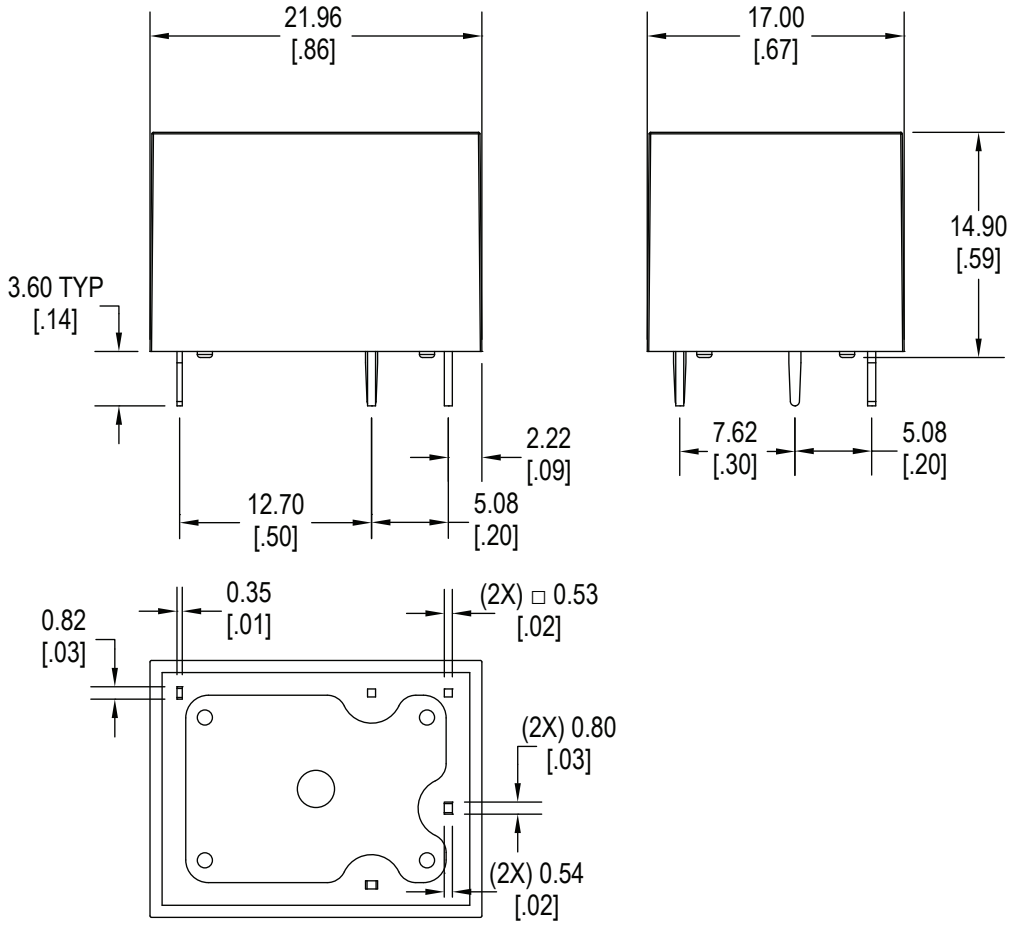
* *Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application.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

Ordering Information

1. Series	J109F	1C	S	10	24VDC	.45
J109F						
2. Contact Arrangement 1A = SPST N.O. 1B = SPST N.C. 1C = SPDT						
3. Sealing Option S = Sealed						
4. Contact Rating 10 = 10A 12 = 12A						
5. Coil Voltage 5VDC 9VDC 12VDC 24VDC 48VDC						
6. Coil Power .36 = .36W .45 = .45W .50 = .50W .80 = .80W						

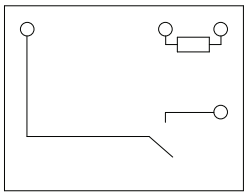
Dimensions

Units = mm

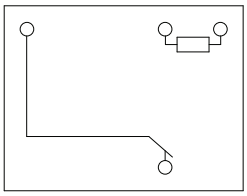


Schematics & PC Layouts

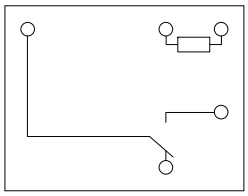
Bottom Views



1A



1B



1C