



## Features

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

## 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
12A contact	12A @ 28VDC & 125VAC gen purpose 1/3hp - 120/240VAC

Contact Resistance	< 50 milliohms initial
Contact Material	AgSnO <sub>2</sub>
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					
3	3.9	25	20	18	11	2.25	.3	.36 .45 .50 .80	7	4
5	6.5	70	56	50	31	3.75	.5			
6	7.8	100	80	72	45	4.50	.6			
9	11.7	225	180	162	101	6.75	.9			
12	15.6	400	320	288	180	9.00	1.2			
18	23.4	900	720	648	405	13.50	1.8			
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, typical
Mechanical Life	10M cycles, typical
Insulation Resistance	100M Ω min. @ 500VDC
Dielectric Strength, Coil to Contact	2500V rms min. @ sea level
Contact to Contact	1000V rms min. @ sea level
Shock Resistance	100m/s <sup>2</sup> for 11 ms
Vibration Resistance	1.50mm double amplitude 10~40Hz
Terminal (Copper Alloy) Strength	10N
Operating Temperature	-55°C to +125°C
Storage Temperature	-55°C to +155°C
Solderability	260°C for 5 s
Weight	11g

### Caution

1. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.

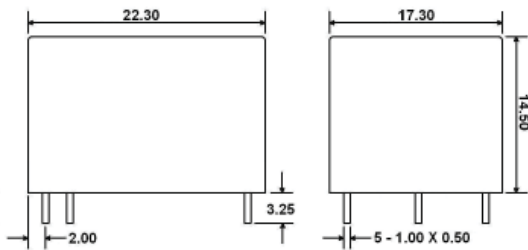
# J109F

## 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	3VDC 5VDC 6VDC 9VDC 12VDC 18VDC 24VDC 48VDC					
6. Coil Power	.36 = .36W .45 = .45W .50 = .50W .80 = .80W					

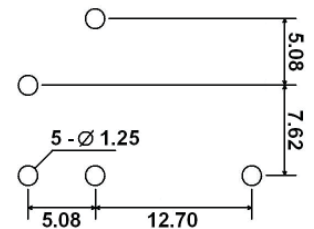
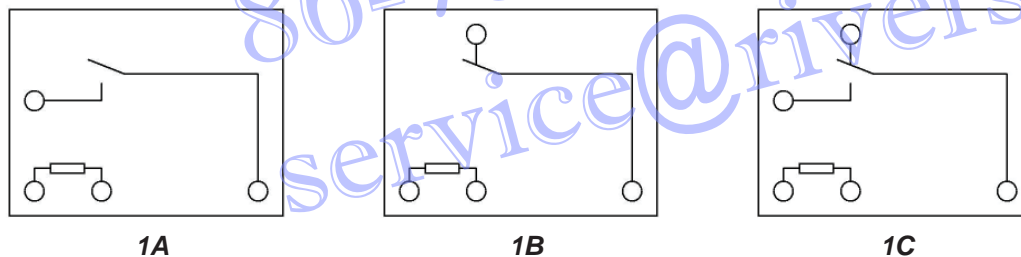
## Dimensions

Units = mm



## Schematics & PC Layouts

Bottom Views



Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.