

CIT Relay & Switch

J114AF

29.0 x 12.7 x 20.0 mm

Features

- Switching capacity 16A
- 20mm height
- PC board mounting
- UL/CUL certified

c UL us
E197851

RoHS COMPLIANT

Contact Data*

Contact Arrangement	1A = SPST N.O. 1C = SPDT 2A = DPST N.O. 2C = DPDT
Contact Rating	1A: 16A @ 250VAC; 30VDC, Resistive, 70°C 1C: 16A @ 250VAC; 30VDC, Resistive, 70°C 1AH: 16A @ 240VAC; 30VDC, Resistive 1CH: 16A @ 240VAC; 30VDC, Resistive 2A: 8A @ 250VAC; 5A @ 30VDC, Resistive, 70°C 2C: 8A @ 250VAC; 5A @ 30VDC, Resistive, 70°C

Contact Resistance	< 50 milliohms initial
Contact Material	$AgSnO_2$
Maximum Switching Power	480W, 4000VA
Maximum Switching Voltage	380VAC, 110VDC
Maximum Switching Current	16A

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	.53W	.72W					
3	3.9	17	13	2.25	0.3	.53 .72	20	10
5	6.5	47	35	3.75	0.5			
6	7.8	67	50	4.50	0.6			
9	11.7	150	110	6.75	0.9			
12	15.6	270	200	9.00	1.2			
24	31.2	1050	800	18.00	2.4			
48	62.4	4250	3200	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	5000V rms min. @ sea level initial
Contact to Contact	1000V rms min. @ sea level initial
Shock Resistance	500m/s² for 11 ms
Vibration Resistance	1.50mm double amplitude 10~40Hz
Operating Temperature	-55ºC to +125ºC
Storage Temperature	-55ºC to +155ºC
Solderability	260ºC for 5 s
Weight	14g

* *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.*

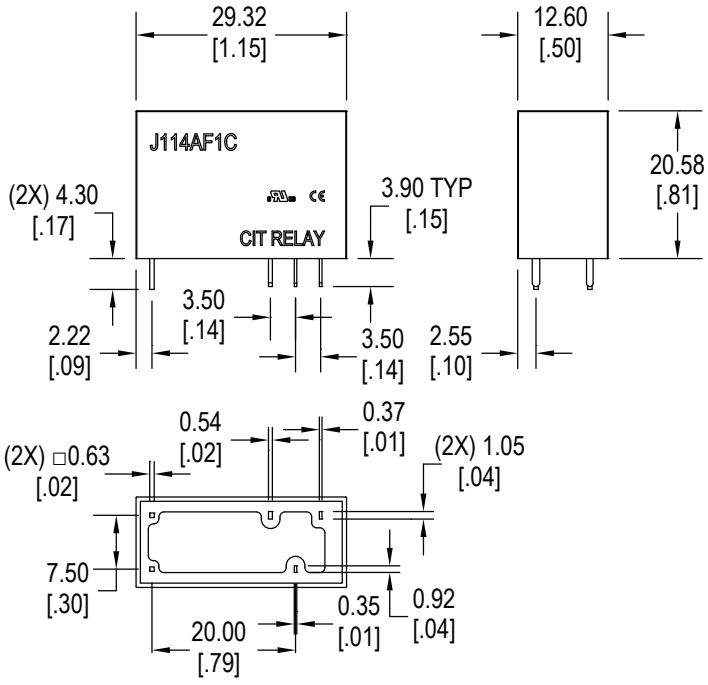
Ordering Information

1. Series	J114AF	1C	S	12VDC	.53
J114AF					
2. Contact Arrangement 1A = SPST N.O. 1C = SPDT 1AH = SPST N.O. Alternate PC Layout 1CH = SPDT Alternate PC Layout 2A = DPST N.O. 2C = DPDT					
3. Sealing Option S = Sealed					
4. Contact Voltage 3VDC 5VDC 6VDC 9VDC 12VDC 24VDC 48VDC					
5. Coil Power .53 = .53W .72 = .72W					

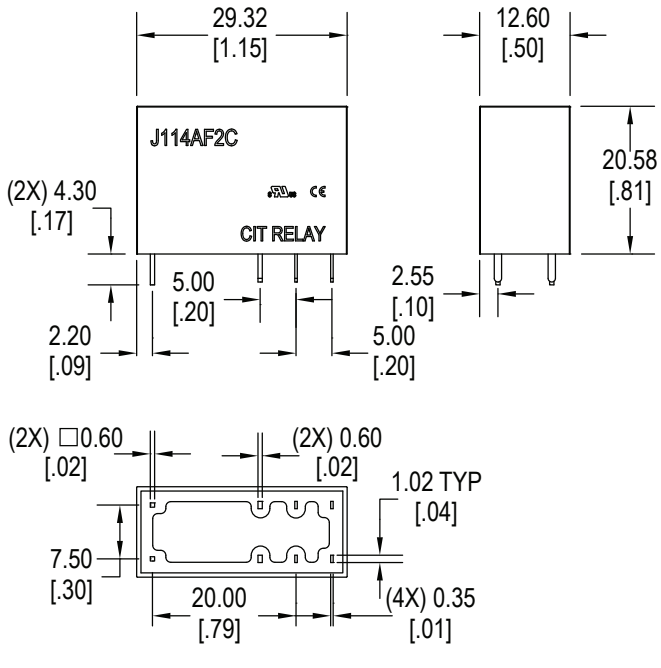
Dimensions

Units = mm

1C



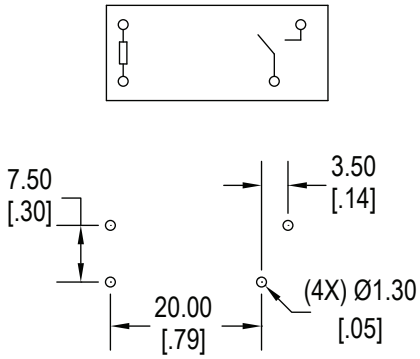
2C



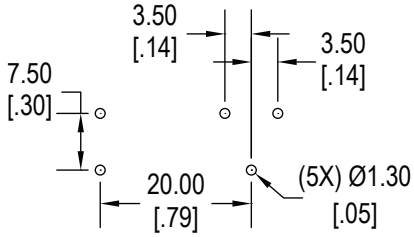
Schematics & PC Layouts

Bottom Views

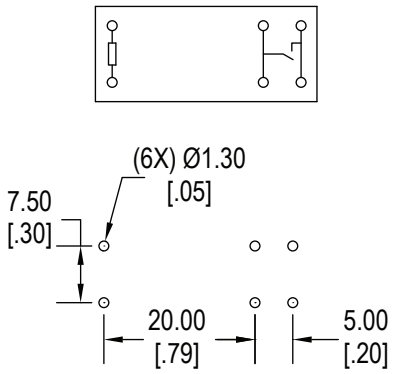
1A



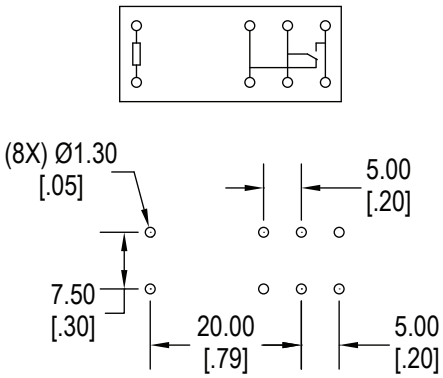
1C



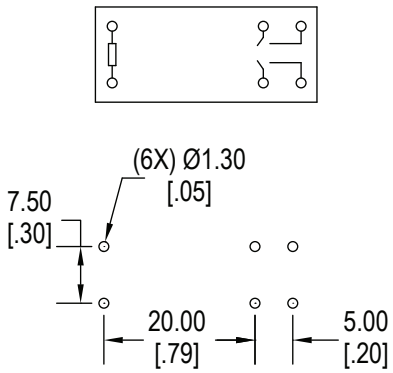
1AH



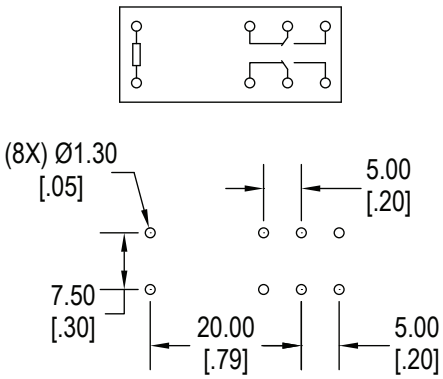
1CH



2A



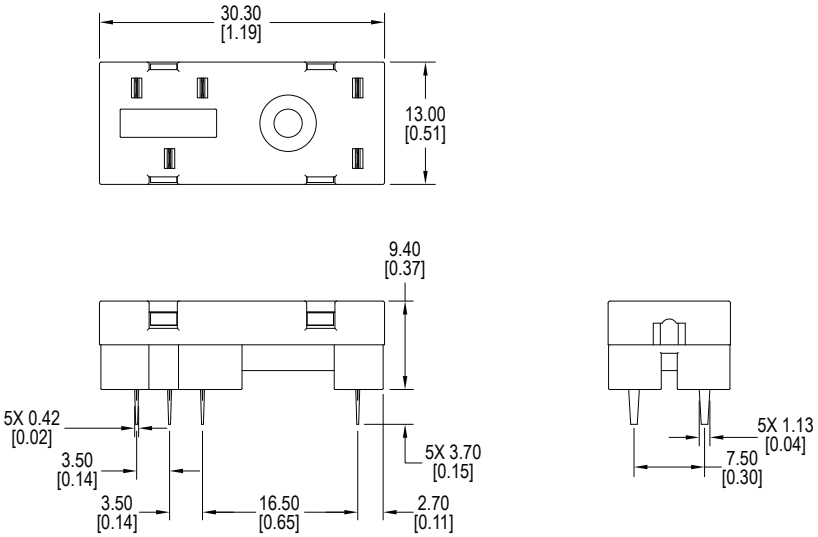
2C



Sockets

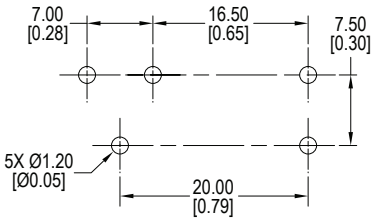
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RS114A

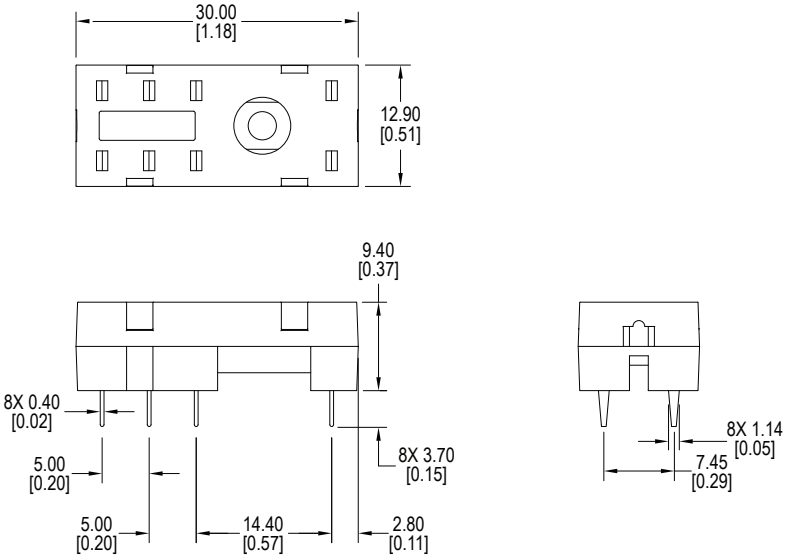


Suggested PC Layout

Top View

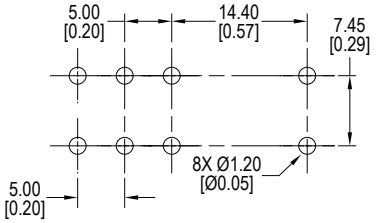


RS114B



Suggested PC Layout

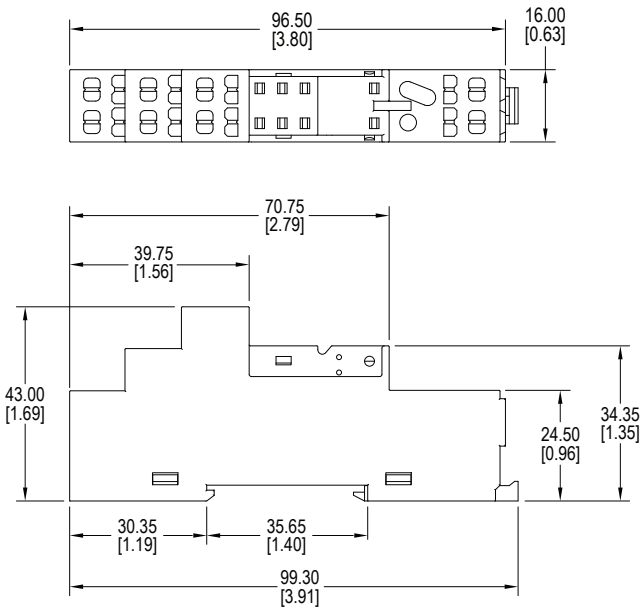
Top View



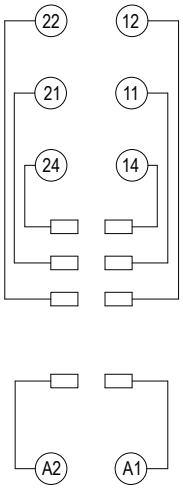
Sockets

Units = mm [in]

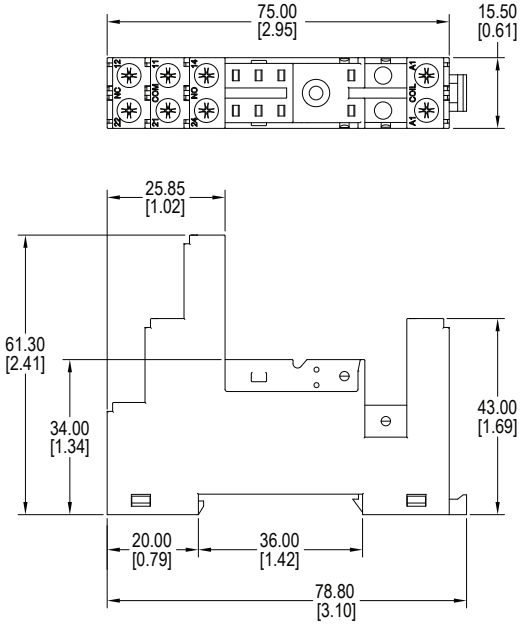
RS114C



Schematic



RS114D



Schematic

