
RoHS Compliant

CIT RELAY & SWITCH™
Division of Circuit Interruption Technology, Inc.

# J114AF

E197851

29.0 x 12.7 x 20 mm

## Features

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

## Contact Data*

| | |
|---|---|
| Contact Arrangement | 1A = SPST N.O.<br>1C = SPDT<br>2A = DPST N.O.<br>2C = DPDT |
| Contact Rating | 1A: 16A @ 250VAC; 30VDC, Resistive, 70°C<br>1C: 16A @ 250VAC; 30VDC, Resistive, 70°C<br>1AH: 16A @ 240VAC; 30VDC, Resistive<br>1CH: 16A @ 240VAC; 30VDC, Resistive<br>2A: 8A @ 250VAC; 5A @ 30VDC, Resistive, 70°C<br>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 | .3 | .53<br>.72 | 20 | 10 |
| 5 | 6.5 | 47 | 35 | 3.75 | .5 | | | |
| 6 | 7.8 | 67 | 50 | 4.50 | .6 | | | |
| 9 | 11.7 | 150 | 110 | 6.75 | .9 | | | |
| 12 | 15.6 | 270 | 200 | 9.00 | 1.2 | | | |
| 24 | 31.2 | 1050 | 800 | 18.00 | 2.4 | | | |
| 48 | 57.6 | 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/s$^2$ for 11 ms |
| Vibration Resistance | 1.50mm double amplitude 10~40Hz |
| Operating Temperature | -55ºC to +105ºC |
| 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.*



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

*Specifications and availability subject to change without notice.*

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## 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

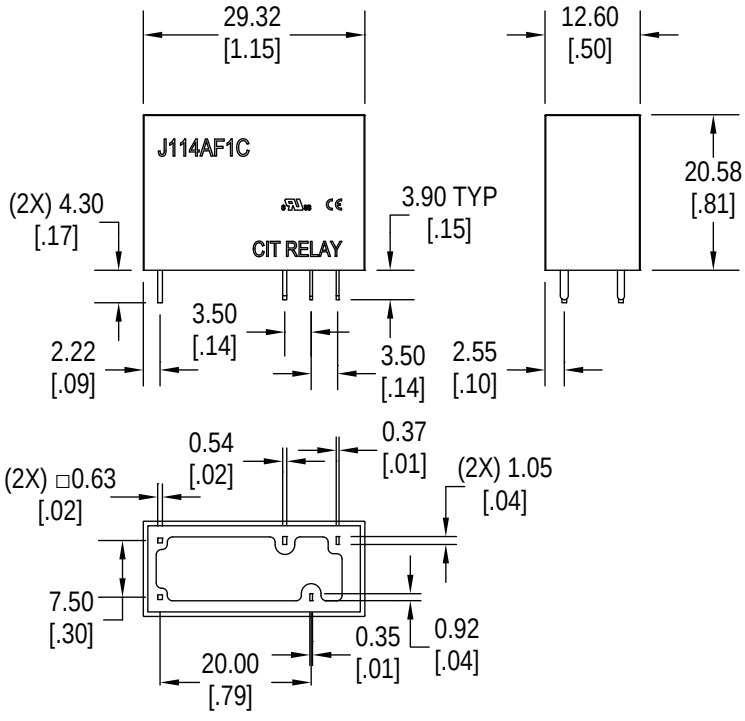
3. Sealing Option
- S = Sealed

4. Contact Voltage
- 3VDC
- 5VDC
- 6VDC
- 9VDC
- 12VDC
- 24VDC
- 48VDC

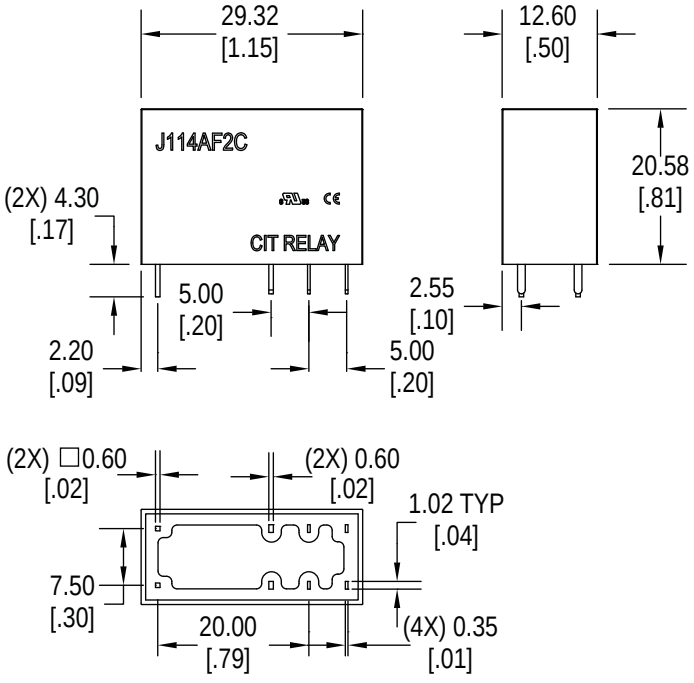
5. Coil Power
- .53 = .53W
- .72 = .72W

## Dimensions

***Units = mm***




***1C***




***2C***



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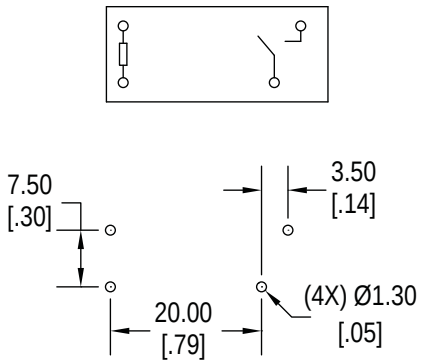
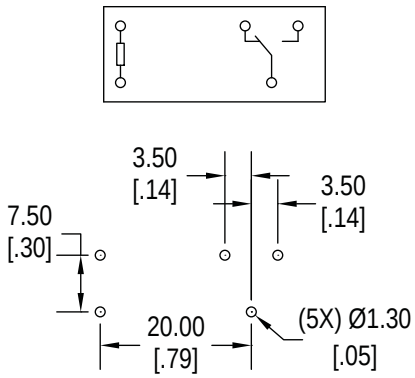
## Schematics & PC Layouts

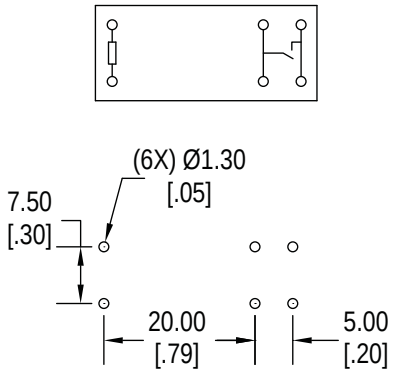
### Bottom Views



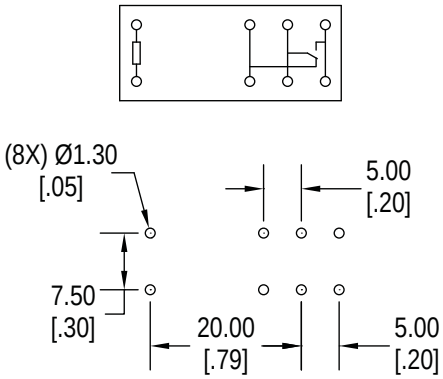

**1A**



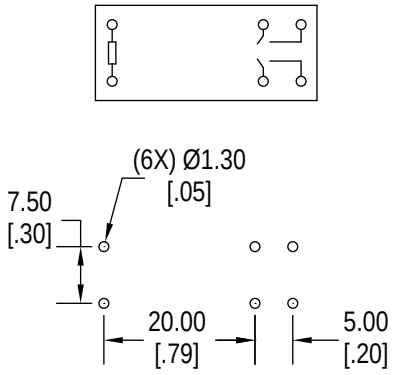

**1C**



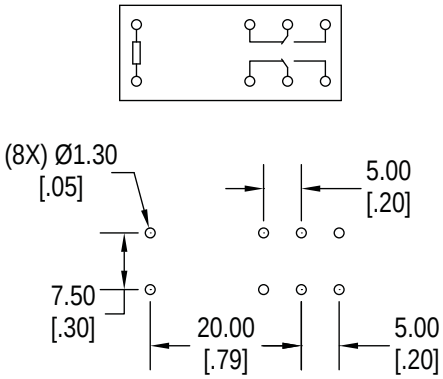

**1AH**




**1CH**




**2A**




**2C**



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