

## Features

- 20A Power Relay
- Produced in accordance to IEC 60335-1
- Reinforced Insulation
- Heavy Contact Load, Strong Shock & Vibration Resistance

cFUS  
E197851



## Contact Data\*

|                           |                        |                                                                                                                                                                                   |                 |
|---------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Contact Arrangement       | 1A = SPST              |                                                                                                                                                                                   |                 |
| Contact Ratings           | A                      | 20A @ 250VAC; Resistive, 50K cycles, 105°C, NO<br>16A @ 250VAC; Resistive, 100K cycles, 105°C, NO<br>1hp @ 120/240VAC; 6K cycles, 40°C, NO<br>TV-8 @ 120VAC; 25K cycles, 40°C, NO | .41W coil power |
|                           | B                      | 16A @ 250VAC; Resistive, 100K cycles, 105°C, NO                                                                                                                                   | .25W coil power |
| Contact Resistance        | < 50 milliohms initial |                                                                                                                                                                                   |                 |
| Contact Material          | AgSnO <sub>2</sub>     |                                                                                                                                                                                   |                 |
| Maximum Switching Power   | 5000VA                 |                                                                                                                                                                                   |                 |
| Maximum Switching Voltage | 300VAC                 |                                                                                                                                                                                   |                 |
| Maximum Switching Current | 20A                    |                                                                                                                                                                                   |                 |

## Coil Data\*

| Coil Voltage<br>VDC |      | Coil Resistance<br>Ω +/- 10% |      | Pick Up Voltage<br>VDC (max)<br><br>75% of rated<br>voltage | Release Voltage<br>VDC (min)<br><br>10% of rated<br>voltage | Coil Power<br>W | Operate Time<br>ms | Release Time<br>ms |
|---------------------|------|------------------------------|------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------|--------------------|--------------------|
| Rated               | Max  | .41W                         | .25W |                                                             |                                                             |                 |                    |                    |
| 5                   | 6.5  | 62                           | 100  | 3.75                                                        | 0.5                                                         | .41<br>.25      | ≤10                | ≤10                |
| 6                   | 7.8  | 90                           | 144  | 4.50                                                        | 0.6                                                         |                 |                    |                    |
| 9                   | 11.7 | 202                          | 324  | 6.75                                                        | .09                                                         |                 |                    |                    |
| 12                  | 15.6 | 360                          | 576  | 9.00                                                        | 1.2                                                         |                 |                    |                    |
| 24                  | 31.2 | 1440                         | 2304 | 18.00                                                       | 2.4                                                         |                 |                    |                    |
| 48                  | 62.4 | 5760                         | 9216 | 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<br>Contact to Contact | 5000V rms min. @ sea level initial<br>1000V rms min. @ sea level initial |
| Shock Resistance                                           | 500m/s <sup>2</sup> for 11 ms                                            |
| Vibration Resistance                                       | 1.50mm double amplitude 10~55Hz                                          |
| Operating Temperature                                      | -40°C to +125°C                                                          |
| Storage Temperature                                        | -40°C to +155°C                                                          |
| Solderability                                              | 260°C 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.

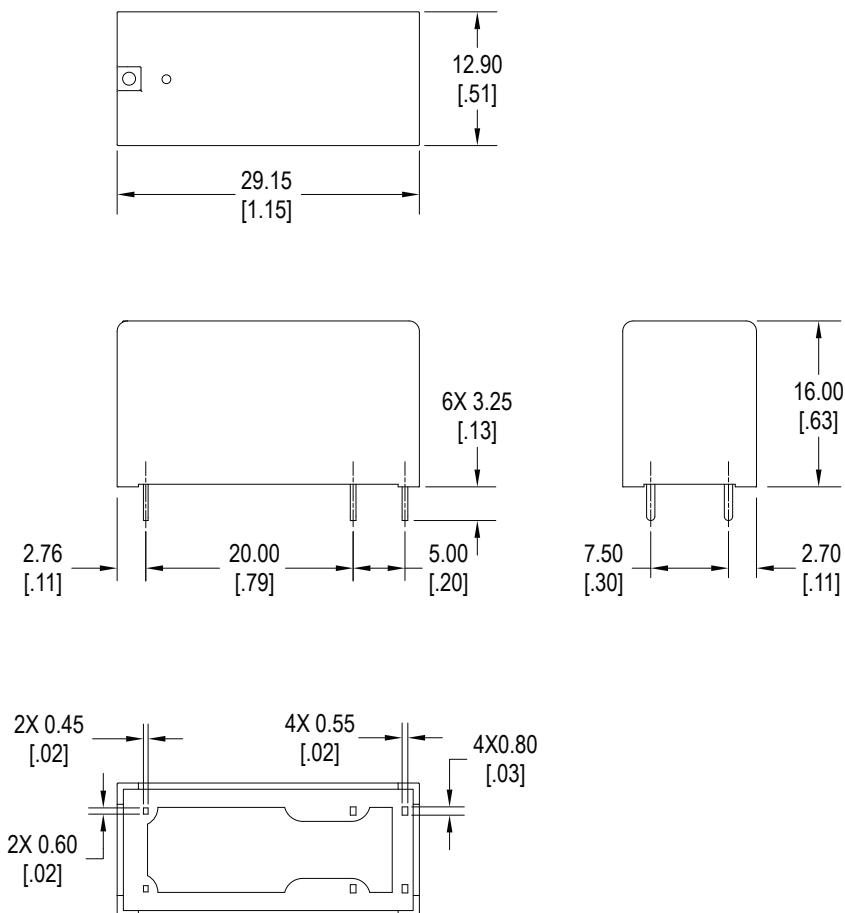
## Ordering Information

|                        |                                                                                                                    |    |   |   |       |     |
|------------------------|--------------------------------------------------------------------------------------------------------------------|----|---|---|-------|-----|
| 1. Series              | J114FLH                                                                                                            | 1A | S | A | 12VDC | .41 |
| J114FLH                |                                                                                                                    |    |   |   |       |     |
| 2. Contact Arrangement | 1A = SPST                                                                                                          |    |   |   |       |     |
| 3. Sealing Option      | S = Sealed, standard                                                                                               |    |   |   |       |     |
| 4. Contact Option      | A = See Contact Ratings on page 1; coil power .41W only<br>B = See Contact Ratings on page 1; coil power .25W only |    |   |   |       |     |
| 5. Coil Voltage        | 5VDC      12VDC<br>6VDC      24VDC<br>9VDC      48VDC                                                              |    |   |   |       |     |
| 6. Coil Power          | .41 = .41W, standard<br>.25 = .25W **                                                                              |    |   |   |       |     |

\*\*only available with "B" contact rating designator

## Dimensions

Units = mm



## Schematics & PC Layouts

Bottom Views

