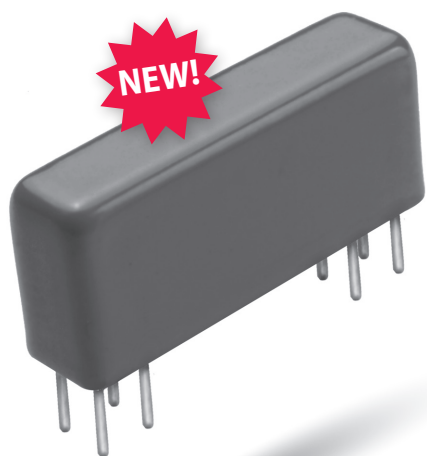


# 2370 SERIES MULTI-POLE REED RELAYS FOR 125°C



## 2370 Series Multi-Pole Reed Relays

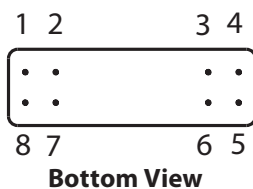
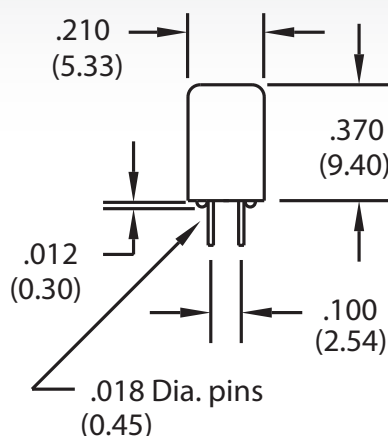
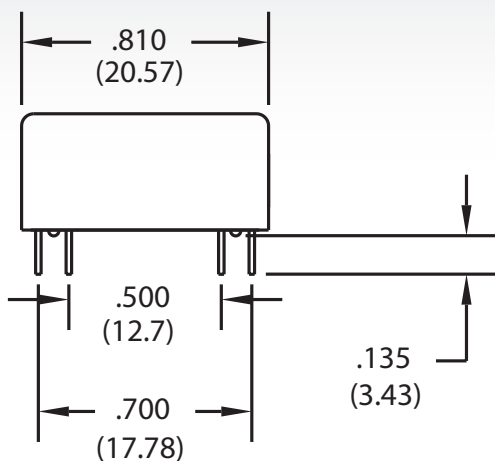
The 2370 Series is designed for automatic test equipment and instrumentation requiring 125°C operation. The 2370 series is available with 2 Form A, 3 Form A and 2 Form C contacts.

## 2370 Series Features

- ▶ Smallest Multi-pole Relay: 0.056 sq. inches/pole (3 pole relay)
- ▶ Hermetically Sealed Contacts
- ▶ Long Life / High Reliability
- ▶ Magnetically Shielding Steel Shell
- ▶ 125°C Operating Temperature
- ▶ RoHS compliant

## DIMENSIONS

*in Inches (Millimeters)*



Bottom View

## Ordering Information

Part Number **23XX-XX-0X0**

### Model Number

2377 (2 Form A)  
2373 (3 Form A)  
2372 (2 Form C)

### Coil Voltage

05=5 volts  
12=12 volts

### Shielding Options

0=No Shielding (2373 & 2372 only)  
2=Coaxial Shield (2377 only)

| MODEL NUMBER                                                                                           |                                                    |                        | 2377 <sup>2</sup> | 2373             | 2372            |
|--------------------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------|-------------------|------------------|-----------------|
| Parameters                                                                                             | Test Conditions                                    | Units                  | 2 Form A          | 3 Form A         | 2 Form C        |
| <b>COIL SPECS.</b>                                                                                     |                                                    |                        |                   |                  |                 |
| Nom. Coil Voltage                                                                                      |                                                    | VDC                    | 5 12              | 5 12             | 5 12            |
| Coil Resistance                                                                                        | +/- 10%, 25° C                                     | Ω                      | 90 500            | 90 500           | 90 500          |
| Operate Voltage                                                                                        | Must Operate by                                    | VDC - Max.             | 2.5 6.7           | 2.5 6.7          | 2.5 6.7         |
| Release Voltage                                                                                        | Must Release by                                    | VDC - Min.             | 0.4 1.0           | 0.4 1.0          | 0.4 1.0         |
| <b>CONTACT RATINGS</b>                                                                                 |                                                    |                        |                   |                  |                 |
| Switching Voltage                                                                                      | Max DC/Peak AC Resist.                             | Volts                  | 200               | 200              | 100             |
| Switching Current                                                                                      | Max DC/Peak AC Resist.                             | Amps                   | 0.5               | 0.5              | 0.25            |
| Carry Current                                                                                          | Max DC/Peak AC Resist.                             | Amps                   | 1.5               | 1.5              | 0.5             |
| Contact Rating                                                                                         | Max DC/Peak AC Resist.                             | Watts                  | 10                | 10               | 3               |
| Life Expectancy-Typical <sup>1</sup>                                                                   | Signal Level 1.0V, 10mA                            | x 10 <sup>6</sup> Ops. | 500               | 500              | 100             |
| Static Contact Resistance (max. init.)                                                                 | 50mV, 10mA                                         | Ω                      | 0.150             | 0.150            | 0.200           |
| Dynamic Contact Resistance (max. init.)                                                                | 0.5V, 50mA<br>at 100 Hz, 1.5 msec                  | Ω                      | 0.200             | 0.200            | 0.250           |
| <b>RELAY SPECIFICATIONS</b>                                                                            |                                                    |                        |                   |                  |                 |
| Insulation Resistance (minimum)                                                                        | Between all Isolated Pins<br>at 100V, 25°C, 40% RH | Ω                      | 10 <sup>12</sup>  | 10 <sup>12</sup> | 10 <sup>9</sup> |
| Capacitance - Typical<br>Across Open Contacts                                                          | No Shield<br>Shield Guarding                       | pF                     | 0.8               | 0.8              | 2.0             |
|                                                                                                        |                                                    | pF                     | 0.2               | N/A              | N/A             |
| Dielectric Strength (minimum)                                                                          | Between Contacts                                   | VDC/peak AC            | 250               | 250              | 200             |
|                                                                                                        | Contacts to Shield                                 | VDC/peak AC            | 1000              | N/A              | N/A             |
|                                                                                                        | Contacts/Shield to Coil                            | VDC/peak AC            | 1000              | 1000             | 1000            |
| Operate Time -<br>including bounce - Typical                                                           | At Nominal Coil Voltage,<br>30 Hz Square Wave      | msec.                  | 0.5               | 0.5              | 1.5             |
| Release Time - Typical                                                                                 |                                                    | msec.                  | 0.15              | 0.15             | 2.0             |
| Top View:<br>Dot stamped on top of relay refers to pin #1 location<br>Grid = .1"x.1" (2.54mm x 2.54mm) |                                                    |                        |                   |                  |                 |

#### Notes:

<sup>1</sup> Consult factory for life expectancy at other switching loads. Resistance >0.5Ω defines end of life or failure to open.

<sup>2</sup> 2377 Coaxial shield is connected to pins #6 and #7.

#### Environmental Ratings:

*Storage Temp:* -35°C to +125°C; *Operating Temp:* -20°C to +125°C; *Solder Temp:* 270°C max; 10 sec. max

All electrical parameters measured at 25°C unless otherwise specified.

*Vibration:* 20 G's to 2000 Hz; *Shock:* 50 G's