

# 1 Description

The 2362 is the Surface Mount version of Coto Technology's popular 2342 2 Form C Pico relay. The 2362 offers a proven reed design with longer life than competing 2 Form C EMR products. The 2362 is the ideal solution for automated test, instrumentation and telecommunication applications to increase system reliability and life.

## **Device Packages**



### 2 Features

- ▶ 2 Real Form C Contacts
- ► Surface Mounted Relay
- ▶ Potting Technology to Minimize Internal Component Stress
- ► Magnetically Shielding Steel Shell
- ▶ High Reliability, Hermetically Sealed Contacts for Long Life
- ► High Speed Switching as Compared to Electromechanical Relays
- ► RoHS compliant

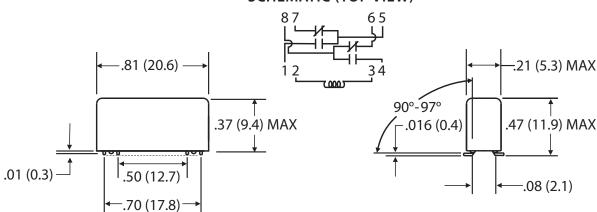
## 3 Applications

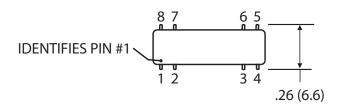
- ► Automated Test Equipment
- ► Instrumentation
- ► Telecommunications

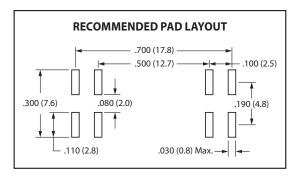
### **4 Dimensions**

In Inches (Millimeters)

## SCHEMATIC (TOP VIEW)







# **5 Ordering Information**

**Coil Voltage**05=5 volts
12=12 volts



## 6 Parameters - Model Number 2362

Parameters	Test Conditions	Units	2 Form C	
Coil Specs.				
Nom. Coil Voltage		VDC	5.0 12.0	
Coil Resistance	+/- 10%, 25°C	Ω	175 1000	
Operate Voltage	Must Operate By	VDC - Max.	3.8 9.0	
Release Voltage	Must Operate By	VDC - Min.	0.4 1.0	
Contact Ratings				
Switching Voltage	Max DC/Peak AC Resist.	Volts	100	
Switching Current	Max DC/Peak AC Resist.	Amps	0.25	
Carry Current	Max DC/Peak AC Resist.	Amps	0.5	
Contact Rating	Max DC/Peak AC Resist.	Watts	3.0	
Life Expectancy - Typical <sup>1</sup>	Signal Level 1.0V, 10mA	x 10 <sup>6</sup> Ops.	250	
Static Contact Resistance (Max. Init.)	50mV, 10mA	Ω	0.200	
Dynamic Contact Resistance (Max. Init.)	0.5V, 50mA at 100Hz, 1.5msec.	Ω	0.250	
Relay Specifications				
Insulation Resistance (Min.)	Between all Isolated Pins at 100V, 25°C, 40%RH	Ω	10 <sup>9</sup>	
Capacitance - Typical Across Open Contacts	No Shield Shield Guarding	pF pF	2.0 N/A	
Dielectric Strength (Min.)	Between Contacts Contacts to Shield Contacts/Shield to Coil	VDC/peak AC VDC/peak AC VDC/peak AC	200 N/A 1000	
Operate Time - Including Bounce - Typical	At Nominal Coil Voltage, 30Hz, Square Wave	msec.	1.5	
Release Time - Typical		msec.	2.0	

### **General Notes:**

1. Consult factory for life expectancy at other switch loads.

## **Environmental Ratings:**

Storage Temp:-35°C to + 100°C; Operating Temp: -20°C to +85°C All electrical parameters measured at 25°C unless otherwise specified.

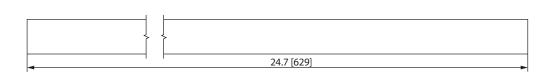
Vibration: 20 G's to 2000 Hz; Shock: 50 G's

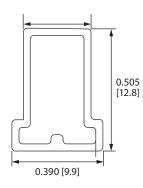


# 7 Package Information

## **Plastic Tube Dimensions**

• 30 relays per tube





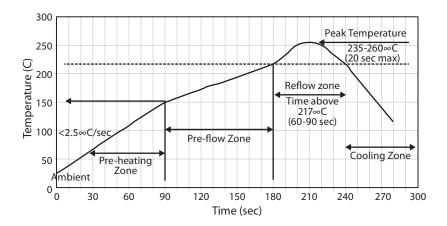




## **8 Relay Processing Notes**

### 8.1 Soldering

Coto Technology uses a higher temperature solder for all internal connections. We recommend that the max relay temperature during the solder reflow process does not exceed 260°C. Temperature and time more than the recommended levels may result in damage to the relay. Recommended solder profile as below.



## 8.2 Cleaning

2362 is designed and manufactured to provide an adequate seal from external conditions. However, caution must be taken during the cleaning process not to expose the relays to conditions that will allow moisture to permeate into the package. Caution should be taken with dwell time between reflow and cleaning, high pressure spraying, and time in cleaning solvent/aqueous solutions, as these cleaning process parameters can contribute to moisture permeation. Board level bake out may be required after wash to remove moisture that has been introduced during cleaning operations.

### 8.3 Relay Storage

Relay parametric specifications are specified at 25°C and 40% RH. Reduced relay performance may result if storage or use environments significantly exceed these conditions. If high insulation resistance is required, Coto Technology recommends that relay storage, processing, and use environments are adequate to achieve the desired results. Relays should be stored in similar environmental conditions as other high-reliability active and passive electronic components. Proper storage of relays is also important to maintain solderability over an extended period of time.

## 8.4 Handling

Relays should be handled with care. Dropping or mishandling relays may result in damage that can contribute to a direct failure or, even worse, a latent field failure. If relays are dropped, Coto Technology recommends that they should be discarded.

Coto Technology does not recommend use of ultrasonic activated equipment with relays. The use of ultrasonic equipment may change the |characteristics of the relay and can contribute to failure.

For more technical and application information, please refer to the following QR code:



For recommendations and best practices for Form C relays refer to the following QR code:





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# **Revision History**

	Date	Description
1	08/31/2023	New layout
2	04/23/2024	Modified dimensional drawing and added pad layout (Section 4)
3	04/23/2024	Modified specifications (Section 6)
4	04/23/2024	Added packaging information (Section 7)