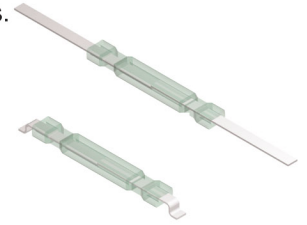


### DESCRIPTION

Coto Technology's FR dry reed switch series is ideally suited for small switching signal applications. This switch has sputtered ruthenium contacts and an extraordinary seal strength, achieved by a patented laser sealing of the glass. In low level or dry switching environments, the FR reed switch typically provides > 1 billion operations.



### FEATURES

- Small size
- SMT-compatible
- Easily formed leads
- Sputtered ruthenium contacts
- Hermetically sealed contacts
- Fast switching speed - up to 500Hz
- Wide range of available magnetic sensitivities
- Rectangular glass for superior pick and place performance
- Lead-free Tin plating
- UL Recognized under UL File BP6039
- RoHS Compliant



### APPLICATIONS

- Proximity Sensing
- Smoke Alarms
- Level Sensor
- Current Sensor
- Relays
- Metering

### SPECIFICATIONS

Parameters	Test Conditions	Min	Typ	Max	Units
<b>Contact Ratings</b>					
Operate Ampere Turns Range	+/-1.5 NI	10		30	NI
Release Ampere Turns Range	+/-1.5 NI	5		30	NI
Switching Voltage	Max DC / Peak AC Resistive			200	VDC
Switching Current	Max DC / Peak AC Resistive			0.5	Amps
Carry Current	Max DC / Peak AC Resistive			1.5	Amps
Contact Rating	Max DC / Peak AC Resistive			10	VA
Life Expectancy	1V, 10mA Signal Level		1000		x10 <sup>6</sup> ops
	10V, 10mA Low Level		500		x10 <sup>6</sup> ops
	50V, 100mA Telecom Load		2		x10 <sup>6</sup> ops
	100Vm 100mA Rated Loads		2		x10 <sup>6</sup> ops
Static Contact Resistance	50mV, 10mA		80	150	mOhms
Contact Material			Ru		
<b>Switch Specifications</b>					
Insulation Resistance	100V, 25 Degrees C, 40% RH	x10 <sup>9</sup>	10 <sup>11</sup>		Ohms
Capacitance	Across Open Contacts		0.3		pF
Dielectric Strength	Between Contacts	250	300		VDC / Peak AC
Operate Time including Bounce	At nominal coil voltage 10Hz Square Wave			0.5	ms
Release Time	Zener-Diode Suppression			0.2	ms
<b>Environmental Ratings</b>					
Storage Temperature		-40		+125	Degrees C
Operating Temperature		-40		+125	Degrees C
Soldering Temperature				265	Degrees C
Vibration Temperature				20	Gs
Shock Resistance				100	Gs
Weight	11 +/- 1ms, 1/2 sine wave		0.13		grams/unit

### ORDERING INFORMATION

A complete part number is represented by the digits below



#### Surface Mount

Refer to operating characteristics table for a complete part number.

#### DYAD

Part #	Operate Range (NI) <sup>1</sup>
FR2S1015	10 to 15
FE2S1020	10 to 20
FR2S1030	10 to 30
FR2S1520	15 to 20
FR2S1525	15 to 25
FR2S2025	20 to 25

<sup>1</sup> Tolerance = +/-1.5NI

#### DYAD Surface Mount

Part #	Operate Range (NI) <sup>1,2,3</sup>
FR2024	10 to 15
FR2259	10 to 20
FR2282	10 to 30
FR2025	15 to 20
FR2249	15 to 25
FR2026	20 to 25

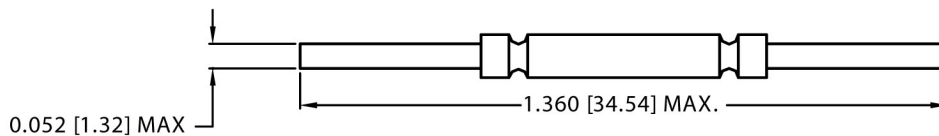
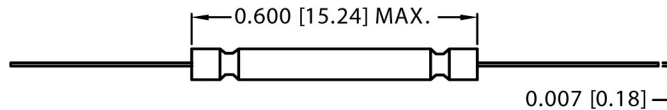
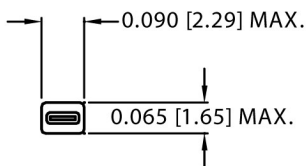
<sup>1</sup> Tolerance = +/-1.5NI

<sup>2</sup> Full Blade Sensitivity

<sup>3</sup> Surface Mount switches are packaged 3,000 parts per reel

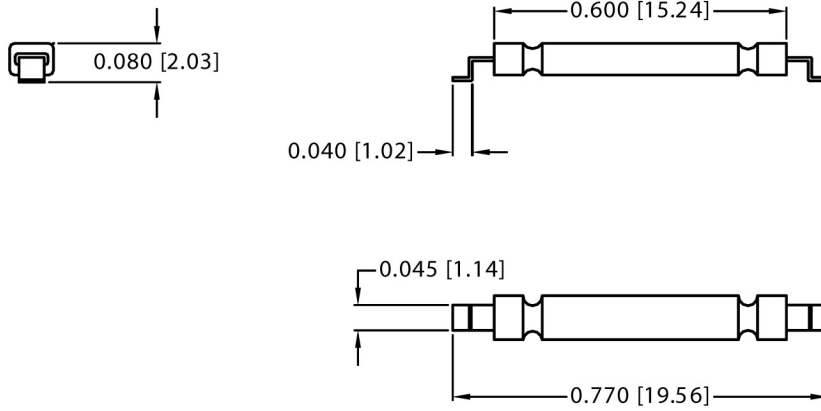
### MECHANICAL DIMENSIONS

Dimensions in inches [mm]



## MECHANICAL DIMENSIONS

Dimensions in inches [mm]



### Recommended Pad Layout

