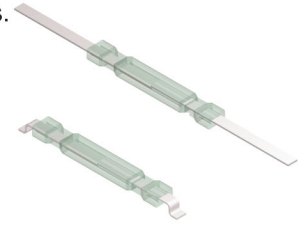


### DESCRIPTION

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

Pb

### APPLICATIONS

- Security
  - proximity sensing
  - smoke alarms
- Automotive
  - level sensor
  - lamp current sensor
- Relays

### SPECIFICATIONS

Parameters	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/PeakAC Resistive			200	VDC
Switching Current	Max DC/PeakAC Resistive			0.5	Amps
Carry Current	Max DC/PeakAC Resistive			1.5	Amps
Contact Rating	Max DC/PeakAC 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
	100V, 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°C, 40% RH	10 <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	°C
Operating Temperature		-40		+125	°C
Soldering Temperature				+260	°C
Vibration Resistance				20	Gs
Shock Resistance	11+/-1ms, 1/2 sine wave			100	Gs
Weight			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

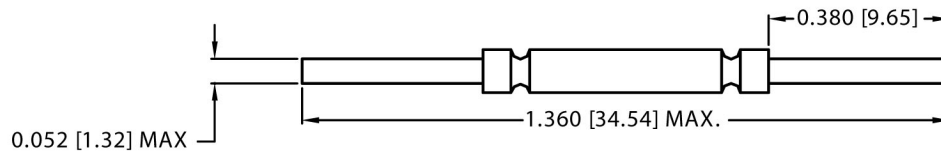
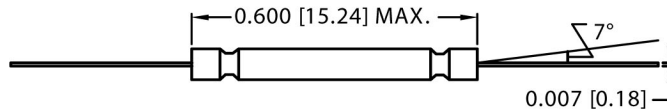
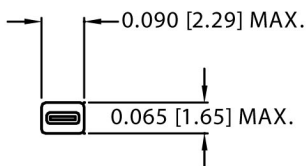
<sup>1</sup> Tolerance = +/-1.5NI

<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]

