FRB DYAD® II Switch



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Coto Technology's FRB dry reed switch series is ideally suited for small switching signal applications. This switch has sputtered ruthenium contacts and a new seal shape with improved seal strength. In low level or dry switching environments, the FRB reed switch typically provides > 1 billion operations.

FRB DYAD® II Features

- Surface mount compatible
- Easily formed leads
- Sputtered ruthenium contacts
- Hermetically sealed contacts
- Fast switching speed - up to 500 Hz
- Rectangular body for superior pick and place performance
- Lead-free tin plating
- RoHS compliant

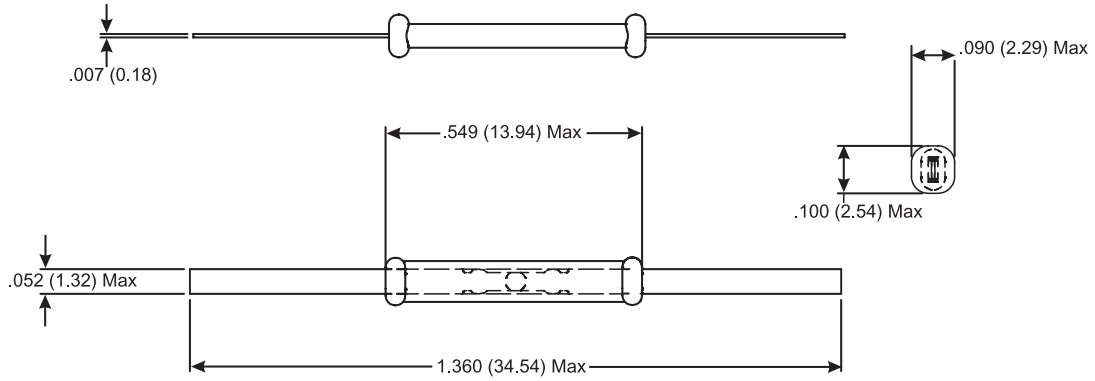
Applications:

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

Parameters	Test Conditions	Min	Typ	Max	Units
Contact Ratings					
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		$x10^6$ ops
	10V, 10mA Low Level		500		$x10^6$ ops
Static Contact Resistance	50mV, 10mA		100	150	mOhms
Contact Material			Ru		
Switch Specifications					
Insulation Resistance	100V, 25 Degrees C, 40% RH	10^9	10^{11}		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			0.5	ms
	10Hz Square Wave				
Release Time	Zener-Diode Suppression			0.2	ms
Environmental Ratings					
Storage Temperature		-40		+125	Degrees C
Operating Temperature		-40		+125	Degrees C
Soldering Temperature				265	Degrees C
Vibration Temperature				20	Gs
Shock Resistance	11 ± 1ms, 1/2 sine wave			100	Gs
Weight			0.13		grams/unit

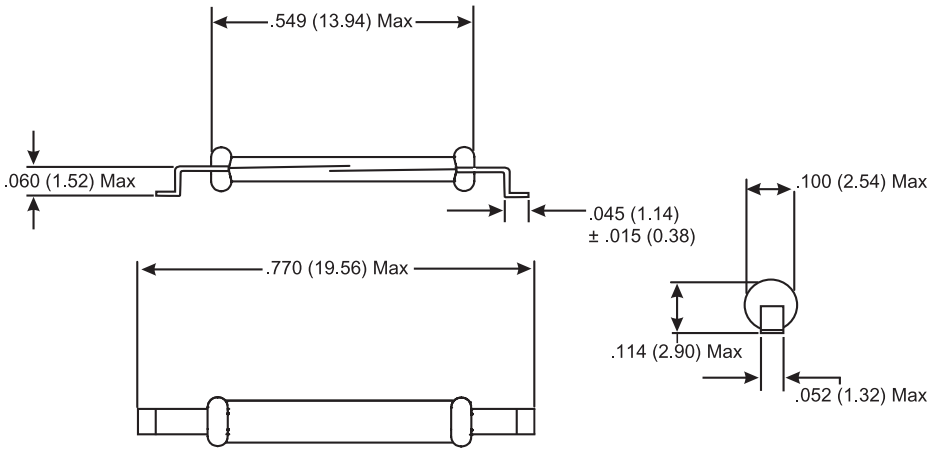
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FRB2S

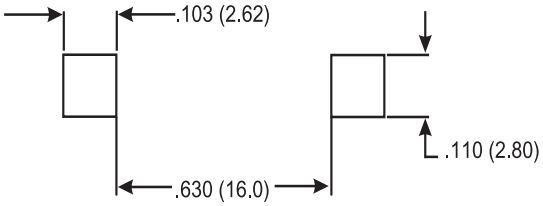


Dimensions in Inches (Millimeters)

FRB SMD



RECOMMENDED PAD LAYOUT



ORDERING INFORMATION

FRB DYAD® II

Part #	Operate Range (NI)[1]
FRB2S1015	10-15
FRB2S1020	10-20
FRB2S1030	10-30
FRB2S1520	15-20
FRB2S1525	15-25
FRB2S2025	20-25

[1]Tolerance = ±1.5NI

FRB DYAD® II Surface Mount

Part #	Operate Range (NI)[1,2,3]
FRB-2024	10-15
FRB-2259	10-20
FRB-2282	10-30
FRB-2025	15-20
FRB-2249	15-25
FRB-2026	20-25

[1]Tolerance = ±1.5NI
[2]Full Blade Sensitivity
[3]Surface Mount Switches are packaged 3,000 parts per reel