

# MISM-7

## 7mm Surface Mount Reed Switch



### Description

The MISM-7 surface mount reed switch is a sub-miniature, normally open switch with a 7mm long x 1.8mm diameter (0.276" x 0.071") glass envelope, capable of switching up to 0.25 Amps. This reed switch is a surface mount version of the MITI-7. It has a high insulation resistance of 1012 Ohms minimum and a contact resistance of less than 150 milliohms.

### Features & Benefits

- Ultra-miniature surface mount normally open switch
- Available sensitivity range 6-10 AT
- Capable of switching 170 Vdc or 0.25A up to 10W
- Hermetically sealed switch contacts are not effected by and have no effect on their external environment
- Zero operating power required for contact closure
- Excellent for switching microcontroller logic level loads
- Very low space requirement

### Additional Information



Resources



Accessories



Samples

### Agency Approvals

Agency	Agency File Number	Ampere-Turns Range
	E47258 E471070	6 - 20AT

**Note:** Contact Littelfuse for specific agency approval ratings.

### Applications

- Position Sensing
- Level Sensing
- Meter Equipment
- Security
- Office Equipment

### Switch Type

<b>Contact Form</b>	A (SPST-NO)
<b>Materials</b>	Body: Glass Leads: Tin-plated Ni-Fe wire

**Note:** SPST-NO = Single-pole, single-throw, normally open

### Electrical Ratings

Contact Rating <sup>1</sup>		W/VA - max.	10
Voltage <sup>3</sup>	Switching <sup>2</sup> Breakdown <sup>4</sup>	Vdc - max.	170
		Vac - max.	120
		Vdc - min.	175
Current <sup>3</sup>	Switching <sup>2</sup> Carry	Adc - max.	0.25
		Aac - max.	0.18
		Adc - max.	0.50
Resistance	Contact, Initial Insulation	Ω - max.	0.150
		Ω - min.	10 <sup>12</sup>
Capacitance	Contact	pF - typ.	0.3
Temperature	Operating Storage <sup>5</sup>	°C	-40 to +125
		°C	-65 to +125

**Notes:**

1. Contact rating - Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
2. When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application Notes AN108A and AN107 for details.
3. Electrical Load Life Expectancy - Contact Littelfuse with voltage, current values along with type of load.
4. Breakdown Voltage - per MIL-STD-202, Method 301.
5. Storage Temperature - Long time exposure at elevated temperature may degrade solderability of the leads.

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### Product Characteristics

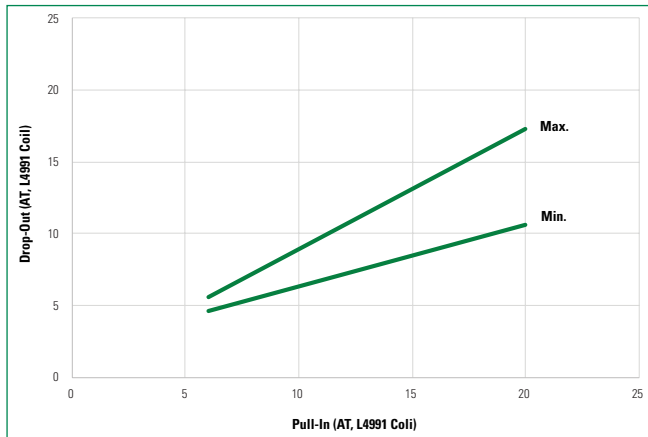
Operating Characteristics		
Operate Time <sup>1</sup>	-	0.45ms - max.
Release Time <sup>1</sup>	-	0.20ms - max.
Shock <sup>2</sup>	11ms 1/2 sine wave	100G - max
Vibration <sup>2</sup>	50-2000 Hertz	30G - max.
Resonant Frequency	-	14kHz - typ.

Magnetic Characteristics		
Pull-In Range <sup>3</sup>	Ampere Turns	6-10, 10-15, 15-20
Rating Sensitivity <sup>4</sup>	Ampere Turns	10
Test Coil	-	L4991

**Notes:**

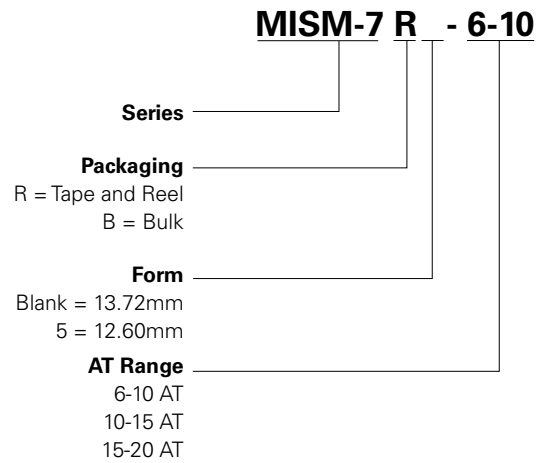
1. Operate (including bounce)/Release Time - per EIA/NARM RS-421-A, diode suppressed coil (Coil I).
2. Shock and Vibration - per EIA/NARM RS-421-A and MIL-STD-202.
3. Pull-In Range - Contact Littelfuse for narrower AT ranges available. These AT values are the before modification AT of the MITI-3V1.
4. Rating Sensitivity - The value at which contact ratings and operating characteristics are determined. Derating may be required below this value.

### Drop-Out vs. Pull In Chart



**Note:** Chart represents the range of Drop-Out, min to max for a given Pull-In value.

### Part Numbering System



**Example:** 6-10 AT product is MISM-7R-6-10

**Note:** These AT values are the before-modification values of the bare reed switch.

### Packaging

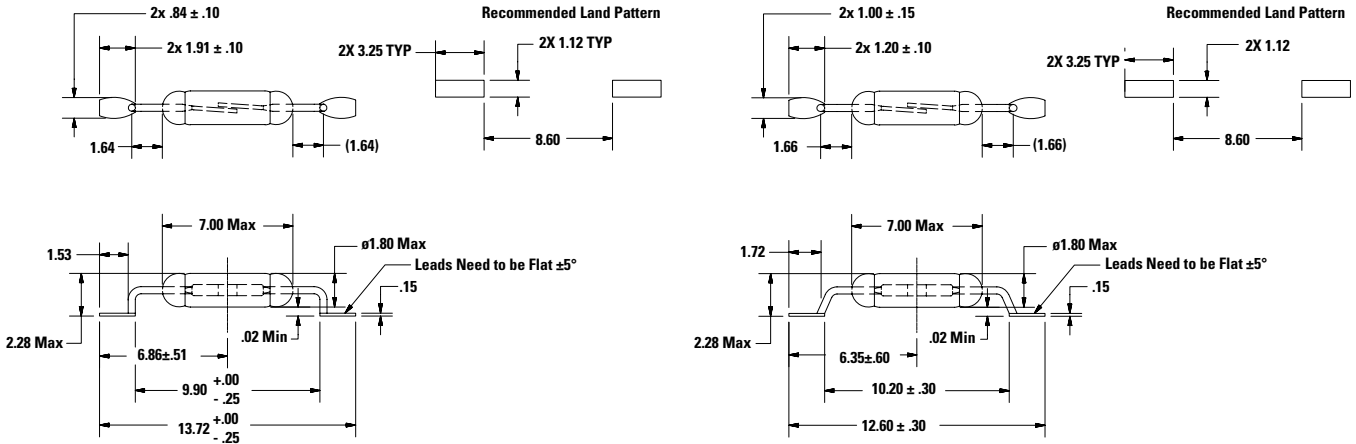
Packaging Option	Packaging Specification	Quantity	Quantity and Packaging Code	Taping Width
Tape and Reel	EIA-RS-481-1	3000	R	32mm

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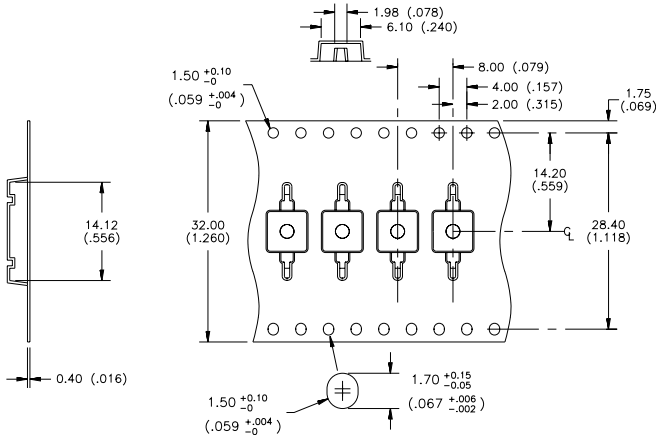
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### Dimensions

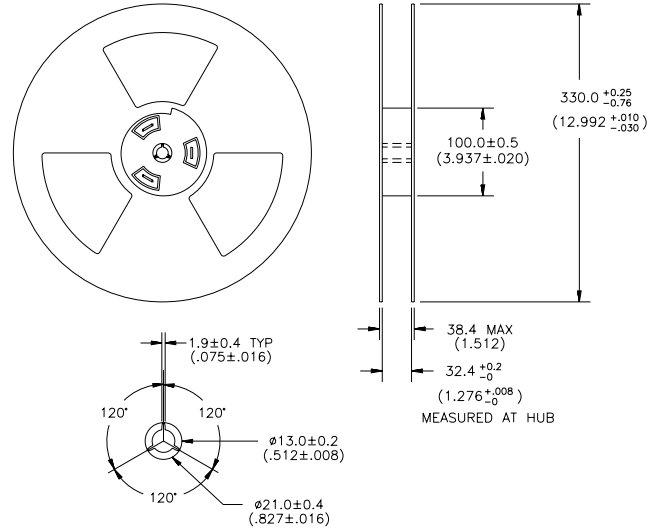
Dimensions in mm



### Tape Dimensions mm (inch)



### Reel Dimensions mm (inch)



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