

# MISM-3V1 7mm Surface Mount Reed Switch



## Description

The MISM-3V1 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-3V1. It has a high insulation resistance of  $10^{12}$  Ohms minimum and a contact resistance of less than 100 milliohms.

## Features

- Ultra-miniature surface mount normally open switch
- Available sensitivity range 6-10 AT
- Capable of switching 170 Vdc or 0.25A up to 10W

## Agency Approvals

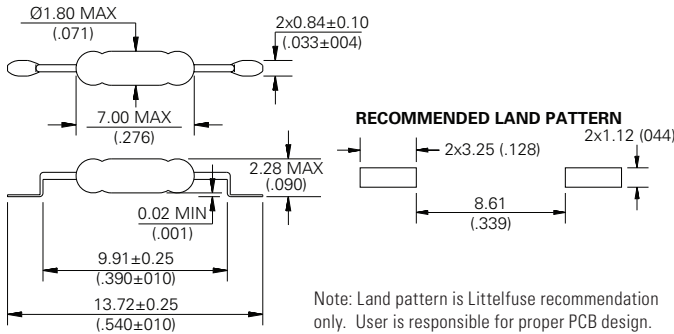
Agency	Agency File Number	Ampere-Turns Range
	E47258 E471070	6-10AT
	DEMKO 14 ATEX 1393U	6-10 AT

## Benefits

- 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

## Dimensions

Dimensions in mm



## Applications

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

## Switch Type

Contact Form	A (SPST-NO)
Materials	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>	Vdc - max.	170
	Breakdown <sup>4</sup>	Vac - max.	120
		Vdc - min.	175
Current <sup>3</sup>	Switching <sup>2</sup>	Adc - max.	0.25
	Carry	Aac - max.	0.18
		Adc - max.	0.50
Resistance	Contact, Initial Insulation	$\Omega$ - max.	0.150
		$\Omega$ - min.	$10^{12}$
Capacitance	Contact	pF - typ.	0.3
Temperature	Operating Storage <sup>5</sup>	$^{\circ}\text{C}$	-40 to +125
		$^{\circ}\text{C}$	-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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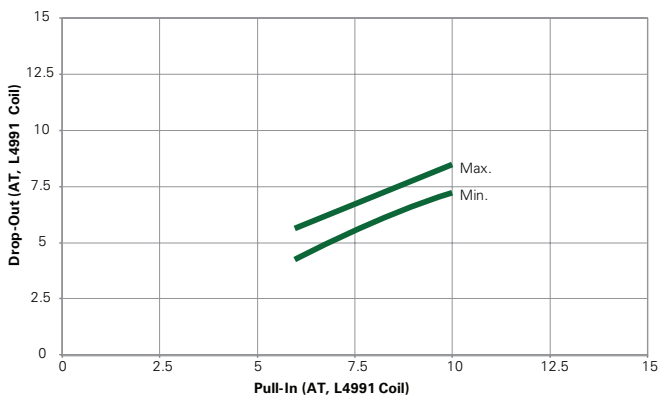
### Product Characteristics

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	150G - max.
Vibration <sup>2</sup>	50-2000 Hertz	30G - max.
Resonant Frequency		18.0kHz - typ.
Magnetic Characteristics		
Pull-In Range <sup>3</sup>	Ampere Turns	6-10
Rating Sensitivity <sup>4</sup>	Ampere Turns	10
Test Coil		L4991

Notes:

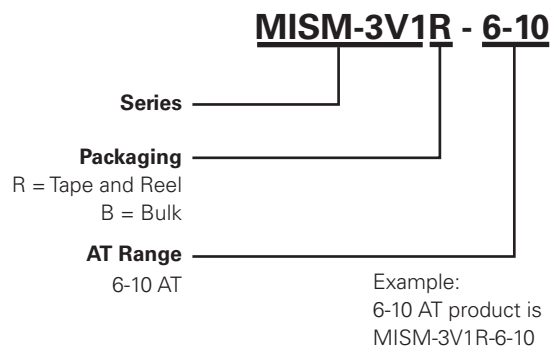
- Operate (including bounce)/Release Time - per EIA/NARM RS-421-A, diode suppressed coil (Coil II).
- Shock and Vibration - per EIA/NARM RS-421-A and MIL-STD-202.
- Pull-In Range - Contact Littelfuse for narrower AT ranges available. These AT values are the before modification AT of the MITI-3V1.
- Rating 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



Note: This AT value is the before-modification value 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

