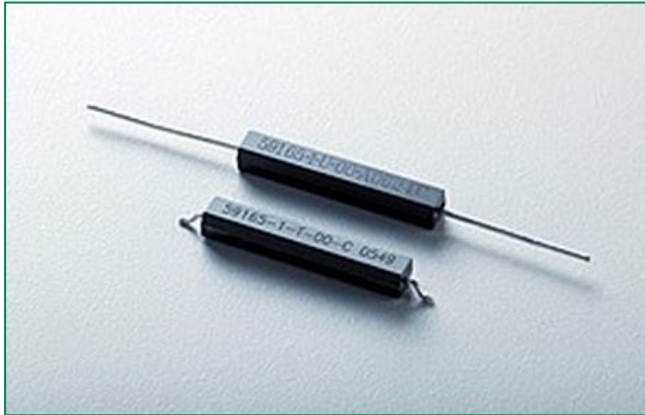


# 59165 Miniature Overmolded Reed Switch + 57045 Actuator



## Description

The 59165 is a miniature overmolded reed switch 16.00mm x 2.40mm x 2.40mm (0.630" x 0.095" x 0.095") with either straight or Gull Wing leads. It has normally open contact, capable of switching up to 200Vdc at 10W.

**Note: The 57045 Actuator is sold separately.**

## Features

- Two-part magnetically operated proximity switch
- Gull Wing, leaded and staple form options
- Tape and reel option
- RoHS Compliant
- Solder reflow capable
- Thermoset overmolded material
- ATEX certified for use in European explosive atmospheres: Ex II 3 G Ex nC IIC Gc
- Certified for use in North American Hazardous Locations: Class I, Division 2 and Zone 2

## Agency Approvals

Agency	Agency File Number
	E61760 and E471070
	DEMKO 14 ATEX 1393U Ex II 3 G Ex nC IIC Gc

Note: Contact Littelfuse for specific agency approval ratings.

## Benefits

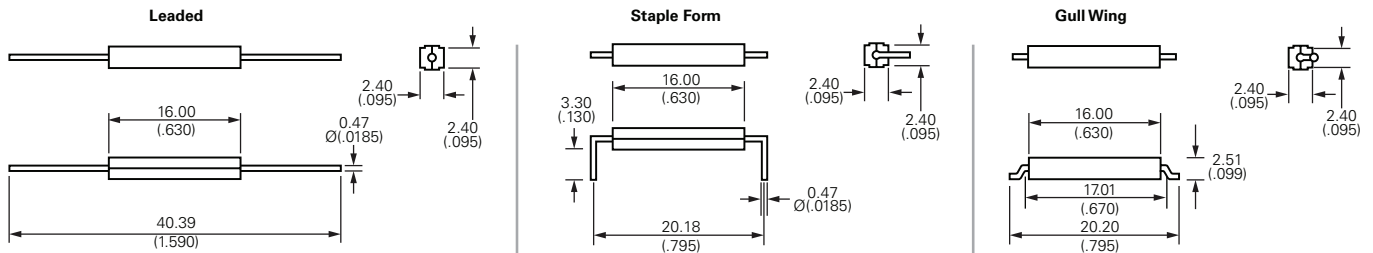
- Suitable for pick and place
- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium
- Hermetically sealed, magnetically operated contacts continue to operate long after optical and other technologies fail due to contamination

## Applications

- Position and Limit Sensing
- Security System Switch
- Door Switch

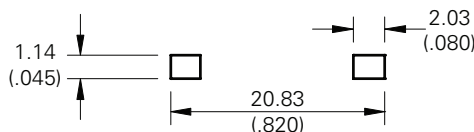
## Dimensions

Dimensions in mm (inch)



## Soldering Footprint

Dimensions in mm (inch)



### 59165 Miniature Overmolded Reed Switch + 57045 Actuator

#### Electrical Ratings

Contact Type			Normally Open
Switch Type			1
Contact Rating <sup>1</sup>		VA/Watt - max.	10
Voltage <sup>3</sup>	Switching <sup>2</sup>	Vdc - max.	200
	Breakdown <sup>4</sup>	Vac - max.	140
		Vdc - min.	250
Current <sup>3</sup>	Switching <sup>2</sup>	Adc - max.	0.5
	Carry	Aac - max.	0.35
		Adc - max.	0.8
Resistance	Contact, Initial Insulation	Ω - max.	0.2
		Ω - min.	10 <sup>10</sup>
Capacitance	Contact	pF - typ.	0.3
Temperature	Operating	°C	-40 to +105

#### Product Characteristics

Operate Time <sup>5</sup>		ms - max.	1.0
Release Time <sup>5</sup>		ms - max.	1.0
Shock <sup>6</sup>	11ms ½ sine	G - max.	100
Vibration <sup>6</sup>	50-2000 Hz	G - max.	30

Notes:

- Contact rating - Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
- 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.
- Electrical Load Life Expectancy - Contact Littelfuse with voltage, current values along with type of load.
- Breakdown Voltage - per MIL-STD-202, Method 301.
- 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.

#### Sensitivity Options (Using 57045 Actuator)

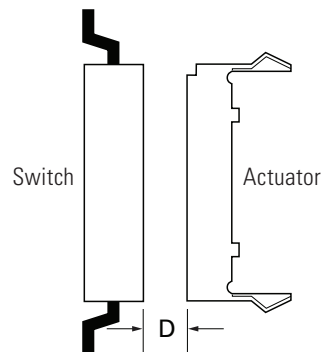
Select Option		S		T		U	
Switch Type		Pull-In AT Range	Activate Distance, D mm (inch) Average	Pull-In AT Range	Activate Distance, D mm (inch) Average	Pull-In AT Range	Activate Distance, D mm (inch) Average
1	Normally Open	10-15	7.4 (.292)	15-20	6.1 (.240)	20-25	5.1 (.201)

Note:

- Pull-In AT Range: These AT values are the before molding and modification AT of the 59165.
- The activation distance is average value post modification for the Gull wing option C or D.

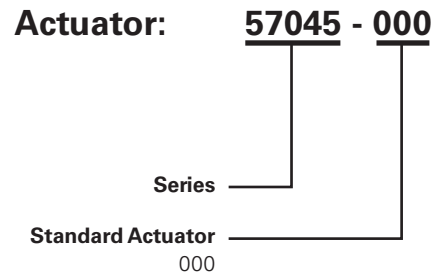
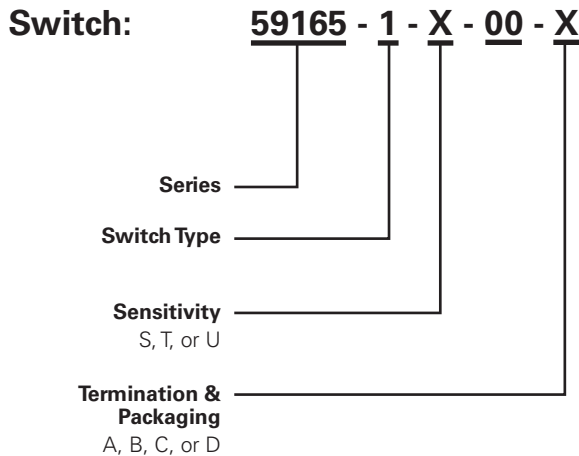
#### Termination Specification

Termination Options	
Select Option	Description
A	Leaded
B	Staple form
C	Gull Wing bulk packed
D	Gull Wing tape and reel



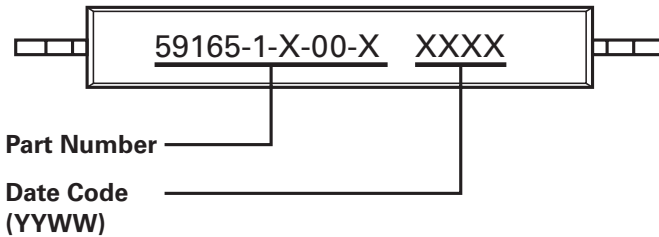
# 59165 Miniature Overmolded Reed Switch + 57045 Actuator

## Part Numbering System



Note: The 57045 Actuator is sold separately.

## Product Marking



## Packaging

Packaging Option	Packaging Specification	Quantity	Quantity and Packaging Code	Taping Width
Bulk	Bulk	800/box	59165-1-X-00-A	N/A
Bulk	Bulk	1500/box	59165-1-X-00-C	N/A
Tape and Reel	EIA-RS-481-1	1500	R	32.00/(1.260)

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Magnetic/Reed Switches](#) category:*

*Click to view products by [Littelfuse](#) manufacturer:*

Other Similar products are found below :

[PSW-21](#) [AMS-20MG](#) [AMS-37-G\\_W/Brk](#) [AMS-38S-I](#) [AMS-38SW](#) [AMS-39B-B](#) [HRB10030](#) [2116900170](#) [AMS-10S-B](#) [AMS-25B-B](#) [AMS-37BROWN](#) [AMS-37L](#) [AMS-38MG](#) [AMS-38SB](#) [AMS-9-B](#) [AMS-T10C\(B\)](#) [505-171W](#) [WHITE](#) [505-211B](#) [505-70B](#) [HM00-01800](#) [4350186](#) [505-101-GC](#) [505-101-GS](#) [505-101-WS](#) [505-392W](#) [505-90G](#) [505-90I](#) [507-381BB](#) [RSW-21A-I](#) [ODC-56B](#) [RI-90GP1020](#) [FF6-21-DC-03-SS](#) [FF6-11-AC-06](#) [FF6-21-AC-06](#) [AMS-10MGW](#) [AMS-37B](#) [GRAY](#) [HM00-01608LF](#) [HM00-04603LF](#) [HM00-02441BLFTR](#) [KSK-1A80/1-1015](#) [44531-0110](#) [44531-0200](#) [44531-0260](#) [35-756](#) [KSK-1A52-1520](#) [KSK-1C90U-1530](#) [KSK-1E85-BV470](#) [MLRR-4-22-28](#) [MLRR-3-42-48](#) [MISM-3V1R-8-12.5](#)