



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

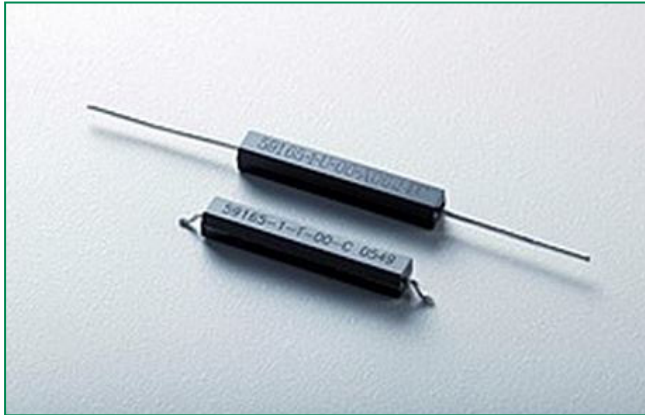
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59165 Miniature Overmolded Reed Switch + 57045 Actuator



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

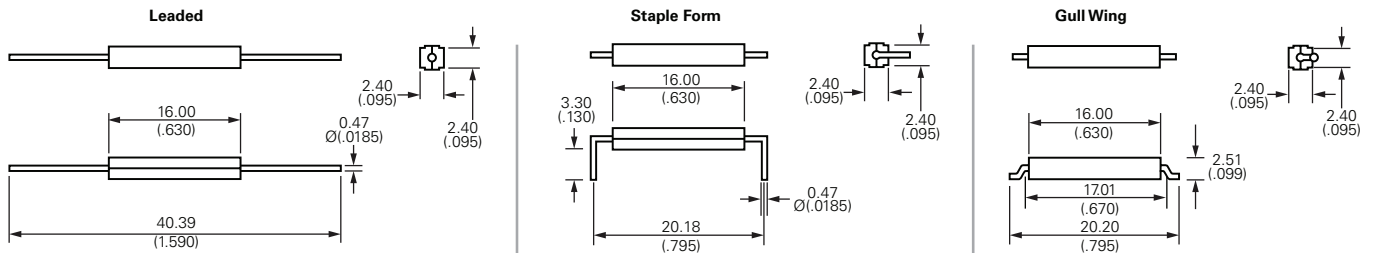
- Suitable for pick and place
- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium
- Hermetically sealed, magnetically operated contacts continue to operate long after optical and other technologies fail due to contamination

Applications

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

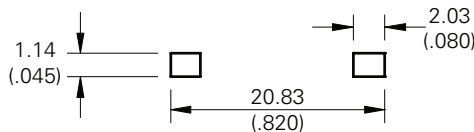
Dimensions

Dimensions in mm (inch)



Soldering Footprint

Dimensions in mm (inch)



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Electrical Ratings

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

Product Characteristics

Operate Time ⁵		ms - max.	1.0
Release Time ⁵		ms - max.	1.0
Shock ⁶	11ms ½ sine	G - max.	100
Vibration ⁶	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)

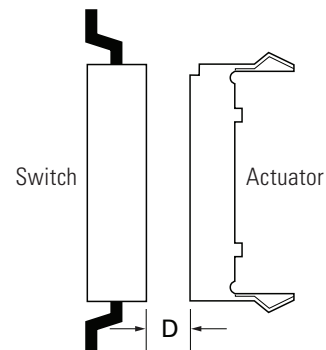
Select Option		S		T		U	
Switch Type		Pull-In AT Range	Activate Distance, D mm (inch) Average	Pull-In AT Range	Activate Distance, D mm (inch) Average	Pull-In AT Range	Activate Distance, D mm (inch) Average
1	Normally Open	10-15	7.4 (.292)	15-20	6.1 (.240)	20-25	5.1 (.201)

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.

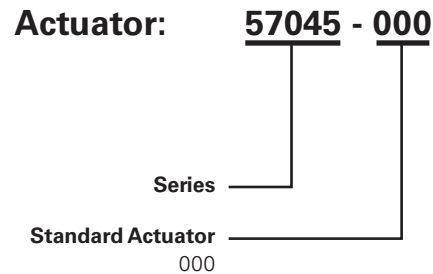
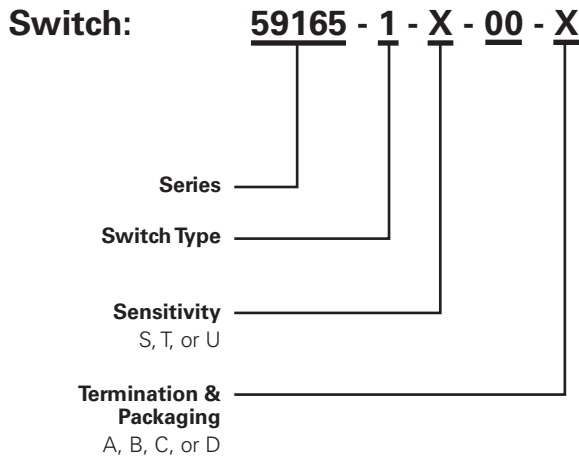
Termination Specification

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



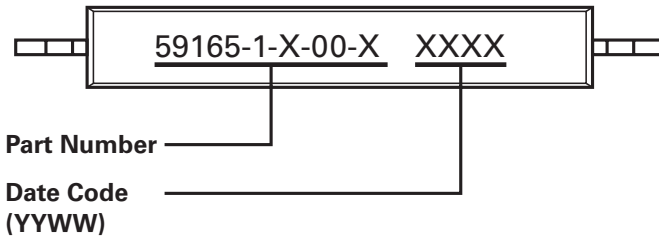
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Part Numbering System



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)