

# DRR-129 50.8mm Close-Differential Reed Switch

#### **OBSOLETE** DATE: 07/17/2017 PCN/ECN# N/A REPLACED BY: DRS-50



#### **Agency Approvals**

Agency	Agency File Number	Ampere-Turns Range
c <b>AL</b> us	E47258 E471070	42-83 AT
Æx>	DEMKO 14 ATEX 1393U	42-83 AT

Note: Contact Littelfuse for specific agency approval ratings.

#### Dimensions

Dimensions in mm (inch)



## Rohs c Sus (Ex)

## Description

The DRR-129 Reed Switch is a standard, normally open switch with a 50.80mm long x 5.25mm diameter (2.000" x .207") glass envelope, capable of high voltage and power switching up to 400Vdc at 100W. Will carry 6A and switch 3A. It has high insulation resistance of  $10^{10}$  ohms minimum and contact resistance of less than 100 milli-ohms.

#### **Features**

- Normally open switch
- Capable of switching 400Vdc or 3.0A at up to 100W
- Minimum voltage breakdown
  600Vdc

#### **Benefits**

 Hermetically sealed switch contacts are not affected by and have no effect on their external environment

## Applications

- Security
- Limit switching

- Available sensitivity range 42-83 AT
- Capable of switching European mains voltage
- Zero operating power required for contact closure
- Industrial safety applications

#### **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.	100
Voltage <sup>3</sup>	Switching <sup>2</sup> Breakdown <sup>4</sup>	Vdc - max. Vac - max. Vdc - min.	400 280 600
Current <sup>3</sup>	Switching <sup>2</sup> Carry	Adc - max. Aac - max. Adc - max.	3.0 2.1 6.0
Resistance	Contact, Initial Insulation	$\Omega$ - max. $\Omega$ - min.	0.100 10 <sup>10</sup>
Capacitance	Contact	pF - typ.	0.6
Temperature	Operating Storage <sup>5</sup>	°C °C	-40 to +125 -65 to +125

Notes:

1. Contact rating - Product of the switching voltage and current should never exceed the wattage rating. Contact Littlefuse 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 1		4.5ms - max.			
Release Time <sup>1</sup>		2.5ms - max.			
Shock <sup>2</sup>	11ms 1/2 sine wave	100G - max.			
Vibration <sup>2</sup>	50-2000 Hertz	30G - max.			
Resonant Frequency	Hz - typ.	850Hz - typ.			
Magnetic Characteristics					
Pull-In Range <sup>3</sup>	Ampere Turns 42-83				
Rating Sensitivity <sup>4</sup>	Ampere Turns	60			
Test Coil		L4988			

Notes: 1. Operate (including bounce)/Release Time - per EIA/NARM RS-421-A,diode suppressed coil (Coil II).

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.

4. Rating Sensitivity - The value at which contact ratings and operating characteristics are determined. Derating may be required below this value.

5. Custom modifications of forming and/or cutting of reed switches are available. Please contact Littelfuse.

## **Drop-Out vs. Pull-In Chart**

#### **Part Numbering System**



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



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

#### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Bulk	Bulk	1000	N/A	N/A