

MRPR-8 20.3mm Miniature High Voltage Reed Switch

OBSOLETE: Date: April 28, 2016 Replacement Series: MRPR-20 Series PCN#: (Sorry i can;t recall this alreadv)



Agency Approvals

Agency	Agency File Number	Ampere-Turns Range
c FN [°] us	E47258 E471070	22-43 AT
Æx>	DEMKO 14 ATEX 1393U	22-43 AT

Dimensions

Dimensions in mm (inch)



Electrical Ratings



Available sensitivity range

· Zero operating power required

• Telecoms line switching

White goods applications

European mains voltage switching

22-43 AT

for contact

Description

The MRPR-8 Reed Switch is a miniature, normally open switch with a 20.32mm long x 2.84mm diameter (0.800" x 0.112") glass envelope, capable of high voltage and power switching of 265Vac at 50VA. The MRPR-8 has high insulation resistance of 10^{10} ohms minimum and contact resistance less than 100 milli-ohms.

Features

- Miniature normally open switch
- Capable of switching 265Vac or 1.0A at up to 50W/VA
- Minimum voltage breakdown 750Vdc

Benefits

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

Applications

- Reed relays (suitable for switching European mains voltage)
- Limit switching

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

•			
Contact Rating 1		W/VA - max.	50
Voltage ³	Switching ² Breakdown ⁴	Vdc - max. Vac - max. Vdc - min.	250 265 750
Current ³	Switching ² Carry	Adc - max. Aac - max. Adc - max.	1.0 0.7 2.5
Resistance	Contact, Initial Insulation	Ω - max. Ω - min.	0.100 10 ¹⁰
Capacitance	Contact	pF - typ.	0.2
Temperature	Operating Storage ⁵	°C °C	-20 to +125 -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.



MRPR-8 20.3mm Miniature High Voltage Reed Switch

Product Characteristics

Operating Characteristics			
Operate Time 1		0.75ms - max.	
Release Time ¹		0.3ms - max.	
Shock ²	11ms 1/2 sine wave	100G - max.	
Vibration ²	50-2000 Hertz	30G - max.	
Resonant Frequency		2.1kHz - typ.	
Magnetic Characteristics			
Pull-In Range ³	Ampere Turns	22-43	
Rating Sensitivity ⁴	Ampere Turns	22	
Test Coil		L4989	

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



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

Additional Information





MRPR-8-22-28

Part Numbering System

32-43 AT

37-43 AT

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

D		-
Daci	V20	ina
Pac	Nau	шч

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

Specifications are subject to change without notice.