

# R41 SERIES

High Voltage Relays

**5kV** SYSTEM VOLTAGE

**SPST**

**Normally Open or Normally Closed**



## FEATURES

SPST Normally Open High Voltage Relays

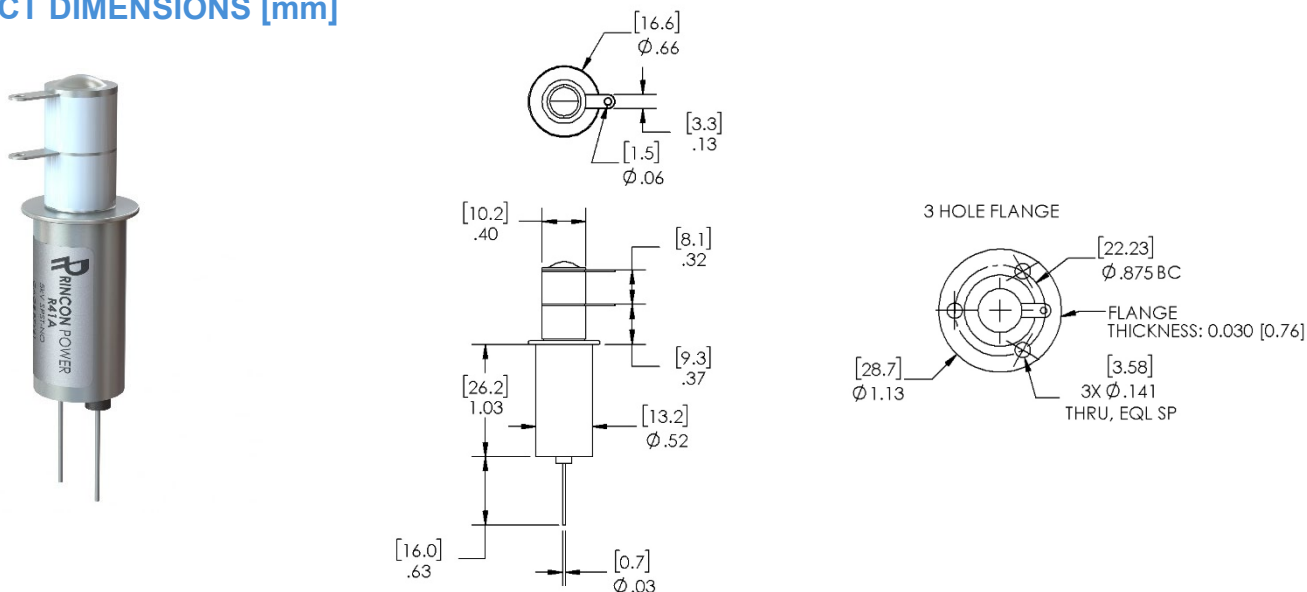
- Vacuum sealed ceramic
- Tungsten contacts for load switching
- PCB Mountable (optional)
- Suitable for RF applications
- High current carry, low current leakage
- Meets requirements of MIL-R-83725
- Meets RoHS 2011/65/EU



## PERFORMANCE

TABLE 1. SPECIFICATIONS		
CHARACTERISTIC	MEASURE	
Contact Arrangement	Form A, SPST Normally Open	
Max Operating Voltage (Peak, contacts to base)	5,000 VDC or 60Hz	
	4,500V at 2.5 MHz	
	3,500V at 16 MHz	
	2,800V at 32 MHz	
Test Voltage (Max Leakage Current: 15µA)	6,000 VDC or 60Hz (Peak, contacts to base)	
Continuous Current DC or 60Hz	30A	
Continuous Current 2.5 MHz	24A	
Continuous Current 16 MHz	16A	
Continuous Current 32 MHz	12A	
Capacitance – Across Open Contacts	1.2 pF	
Capacitance – Contacts to Ground	1.2 pF	
Coil Hi-Pot	500V	
Contact Resistance (Max)	0.02 ohm @ 1A	
Operate Time (Max, incl bounce)	10ms	
Release Time (Max)	10ms	
Shock - Functional, 1/2 Sine, 11ms	25G	
Shock – Destructive, 1/2 Sine, 11ms	50G	
Operating Temperature	-55°C to 125°C	
Vibration 10Hz-2,000Hz)	5 G	
Ingress Protection	Hermetic, exceeds IP67and IP6K9	
Mechanical life	2,000,000 cycles	
Weight	28 g	
COIL (25° C)	MEASURE	
Nominal Voltage	12 VDC	26.5 VDC
Pick-up Voltage (Max)	8 VDC	16 VDC
Drop-out Voltage (Min)	0.5 VDC	1.0 VDC
Coil Resistance	70Ω	290Ω

## PRODUCT DIMENSIONS [mm]



## ORDERING KEY

TABLE 3. PRODUCT NOMENCLATURE				
	CONTACT Arrangement	COIL	HV Terminals	Mount
<b>R41</b>	<b>A</b> Normally Open <b>B</b> Normally Closed	<b>2</b> 12Vdc coil, Bus Wire <b>3</b> 24Vdc coil, Bus Wire	<b>3</b> Solder connection	<b>2</b> 3-hole flange <b>4</b> standard flange

## NOTES

- Relay is operated by a coil that changes resistance with temperature: Maximum coil voltage will be lower than indicated at temperatures above 25°C, and higher than indicated at temperatures below 25°C.
- Nominal Coil Voltage for Pick-up Current, Coil Current and Coil Power specifications, Current/Wattage will be lower than indicated at temperatures above 25°C and higher than indicated at temperatures below 25°C.
- Pick-up Voltage and Drop Out Voltage will be lower than indicated at temperatures below 25°C and higher than indicated at temperatures above 25°C.

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