

# R41 SERIES

**High Voltage Relays** 

**5kV SYSTEM VOLTAGE** Make & Break Load Switching

## FEATURES

- SPST-NO and SPST-NC
- Vacuum sealed ceramic
- Tungsten contacts for load switching
- Compact design
- Suitable for RF applications



- High current carry, low current leakage
- Designed to meet requirements of MIL-R-83725
- Mountable in any orientation
- Meets RoHS 2011/65/EU



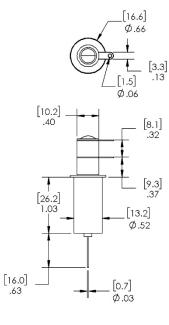


### PERFORMANCE

TABLE 1. SPECIFICATIONS		
CHARACTERISTIC	MEASURE	
Contact Arrangement	Form A, SPST-NO or Form B, SPST-NC	
Max Operating Voltage (Peak, between Contacts and Contacts to Base)	5.0 kV dc or 60Hz)	
(Max Leakage Current: 15µA)	4.5 kV dc at 2.5 MHz	
	3.5 kV dc at 16 MHz	
	2.8 kV dc at 32 M	MHz
Test Voltage (Peak, between Contacts and Contacts to Base) (Max Leakage Current: 15µA)	6 kV dc or 60Hz	
Continuous Current, Max DC or 60Hz	30A	
Continuous Current, Max 2.5 MHz	24A	
Continuous Current, Max 16 MHz	16A	
Continuous Current, Max 32 MHz	12A	
Capacitance – Across Open Contacts	1.2 pF	
Capacitance – Contacts to Ground	1.2 pF	
Coil Hi-Pot (V RMS, 60Hz)	500V	
Contact Resistance (Max)	0.02 ohm @ 1A	
Operate Time (Max, incl bounce)	10ms	
Release Time (Max)	10ms	
Shock - Operating, 1/2 Sine, 11ms	50G	
Vibration, Operating, Sine (55-2,000Hz)	10G	
Operating Temperature	-55°C to 125°C	
Ingress Protection	Hermetic, exceeds IP67and IP6K9	
Mechanical life	2,000,000 cycles	
Weight	28 g	
COIL (25° C)	MEASURE	
Nominal Voltage (Vdc)	12	26.5
Pick-up Voltage, Max (Vdc)	8	16
Drop-out Voltage (Vdc) Coil Resistance	0.5-5 70Ω	1.0-10 290Ω
	7002	29012

# **PRODUCT DIMENSIONS [mm]**





3 HOLE FLANGE

[22.23] Ø.875 BC FLANGE THICKNESS: 0.030 [0.76] [28.7] Ø 1.13 X Ø.141 THRU, EQL SP

## **ORDERING KEY**

TABLE 2. PRODUCT NOMENCLATURE					
Series	Contact Arrangement	Coil	High Voltage Connection	Mounting	
R41	A SPST-Normally Open	2 12Vdc Coil, Bus Wire	3 Solder Connection	2 3-Hole Flange	
	B SPST- Normally Closed	3 26.5Vdc Coil, Bus Wire		4 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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