

# R43 SERIES

### **High Voltage Relays**

## **10kV** SYSTEM VOLTAGE

Make & Break Load Switching



#### **FEATURES**

- SPST-NO and SPST-NC
- Vacuum sealed ceramic
- Suitable for RF applications
- Tungsten contacts for load switching
- Mountable in any orientation
- Meets RoHS 2011/65/EU



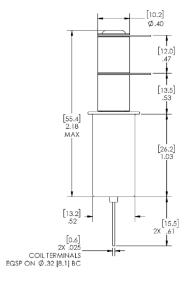


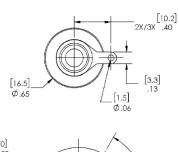
#### **PERFORMANCE**

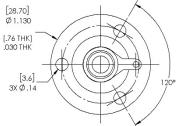
TABLE 1. SPECIFICATIONS		
CHARACTERISTIC	MEASURE	
Contact Arrangement	Form A, SPST-NO or Form B, SPST-NC	
Max Operating Voltage (Peak, between Contacts and Contacts to Base)	10 kV dc or 60Hz	
(Max Leakage Current: 15µA)	7kV dc at 2.5 MHz	
	6kV dc at 16 MHz	
	4kV dc at 32 MHz	
Test Voltage (Peak, between Contacts and Contacts to Base) (Max Leakage Current: 15µA)	11kV dc or 60Hz	
Continuous Current, Max DC or 60Hz	25A	
Continuous Current, Max 2.5 MHz	20A	
Continuous Current, Max 16 MHz	13A	
Continuous Current, Max 32 MHz	10A	
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 (55Hz-2,000Hz)	10G	
Operating Temperature	-55°C to 125°C	
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)	0.5-5 1.0-10	
Coil Resistance	$70\Omega$ 290 $\Omega$	

#### **PRODUCT DIMENSIONS [mm1]**









#### **ORDERING KEY**

TABLE 2. PRODUCT NOMENCLATURE				
Series	Contact Arrangement	Coil	High Voltage Connection	Mounting
R43	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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