

# OX/OY Series

## Ceramic Composition 10% Tolerance

The OX/OY Series of fixed ceramic resistors are ideal for circuitry associated with surges, high peak power or high energy. They offer enhanced performance in high voltage power supplies, R-C snubber circuits, and inrush limiters. The OX/OY resistors can often replace carbon composition resistors which can be difficult to source.



### FEATURES

- Replaces 1 and 2 watt carbon composition resistors
- Meets high energy density demands
- High peak power
- 10% Tolerance

### SERIES SPECIFICATIONS

Series	Watts max.*	Resistance range	Joules max.**	Max. working volts
OX	1	3.3Ω-100K	50	300
OY	2	3.3Ω-1M	80	400

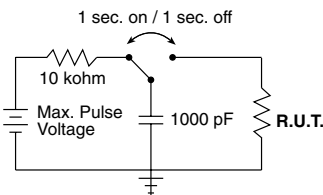
\* at 70°C. \*\*For a single impulse.

### CHARACTERISTICS

<b>Terminals</b>	Pb-free solder-coated axial	
<b>Coating</b>	Silicone ceramic	
<b>Derating</b>	Linear from 100% @ +70°C to 0% @ +200°C	
<b>Operating Temp. Range</b>	-40°C to +220°C	
<b>Tolerance</b>	±10% standard	
<b>Power Rating</b>	Based on 70°C free air rating	
<b>Temperature Coefficient</b>	-1300 ±300ppm/°C.	

	OX	OY
<b>Max Working Voltage</b>	300V	400V
<b>Dielectric Strength</b>	500V	700V
<b>Max Overload Voltage</b>	600V	800V
<b>Max Pulse Voltage<sup>1</sup></b>	14KV	20KV
<b>Pulse Tolerance, 100 pulses</b>	1240V @ 52μF, 40J/ 35 sec.	1640V @ 52μF, 70J/35 sec.

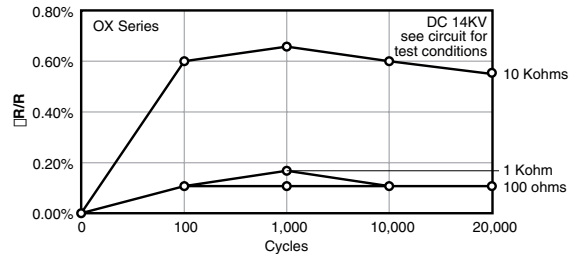
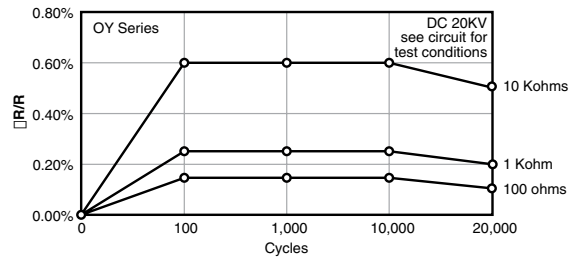
<sup>1</sup>See figures



14KV and 20KV values used in circuit as shown; full voltage not applied directly to resistor.

Test Condition	Maximum ΔR
<b>Life Test</b> MIL-STD-202, Method 108	±5%
<b>Short Time Overload</b> 2x rated V, 5 sec ON @ 70°C	±(2% +0.05Ω)
<b>Resistance to Pulse<sup>1</sup></b> 20,000 cycles. See circuit for test conditions	±5%
<b>Thermal Shock</b> MIL-STD-202, Method 107	±(2% ±0.05Ω)
<b>Moisture Resistance</b> 1000 hrs @ 40°C, 90 - 95% RH	±5%

### Resistance to Pulse



(continued)

