

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

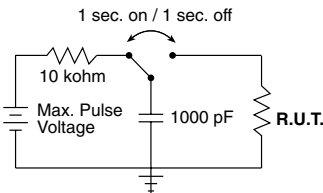
* at 70°C. **For a single impulse.

CHARACTERISTICS

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

	OX	OY
Max Working Voltage	300V	400V
Dielectric Strength	500V	700V
Max Overload Voltage	600V	800V
Max Pulse Voltage¹	14KV	20KV
Pulse Tolerance, 100 pulses	1240V @ 52μF, 40J/ 35 sec.	1640V @ 52μF, 70J/35 sec.

¹See figures



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

Test Condition	Maximum ΔR
Life Test MIL-STD-202, Method 108	±5%
Short Time Overload 2x rated V, 5 sec ON @ 70°C	±(2% +0.05Ω)
Resistance to Pulse¹ 20,000 cycles. See circuit for test conditions	±5%
Thermal Shock MIL-STD-202, Method 107	±(2% ±0.05Ω)
Moisture Resistance 1000 hrs @ 40°C, 90 - 95% RH	±5%

Resistance to Pulse



(continued)

