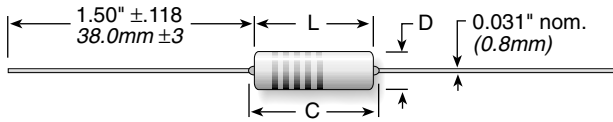


# OX/OY Series

Ceramic Composition  
10% Tolerance

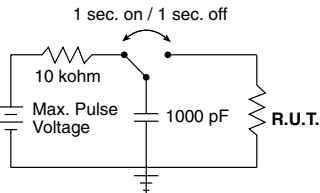
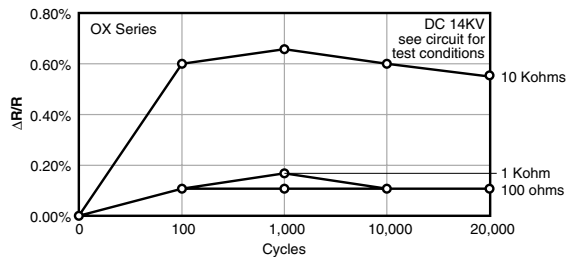
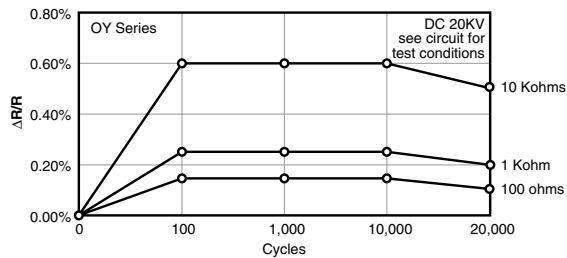


Series	Watts max.*	Resistance		Length L		Length C		Diameter D ±.039 (±1.0)	Joules max.**	Max Working volts	Qty. per reel
		min.	max.	±.039 (±1.0)	max.	±.039 (±1.0)	max.				
OX	1	3.3	100K	0.65 / 16.5	0.748 / 19.0	0.217 / 5.5	50	300	1000		
OY	2	3.3	1M	0.748 / 19.0	0.886 / 22.5	0.276 / 7.0	80	400	500		

\* at 70°C. \*\*For a single impulse.

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.

## RESISTANCE TO PULSE



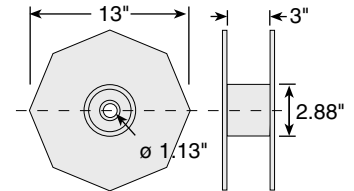
## FEATURES

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

## SPECIFICATIONS

**Material**  
**Terminals:** Pb Free Solder-coated axial  
**Coating:** UL-94 V0 approved silicone  
**Derating:** Linear from 100% @ +70°C to 0% @ +200°C  
**Operating Temp. Range:** -40°C to +220°C  
**Electrical**  
**Tolerance:** ±10% standard  
**Power Rating:** Based on 70°C free air rating.  
**Temperature Coefficient:** -1300 ±300ppm/°C.

## REEL DIMENSIONS



## PERFORMANCE CHARACTERISTICS

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

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

<sup>1</sup>See figures, left

## ORDERING INFORMATION

RoHS Compliant

**OX82GKE**

Size: OX = 1W, OY = 2W  
 Ohm Value Example: 33G = 3.3 Ohms, 330 = 33 Ohms, 331 = 330 Ohms  
 Tolerance: K = 10% Standard

Check product availability at [www.ohmite.com](http://www.ohmite.com)

## STANDARD PART NUMBERS FOR OX/OY SERIES

Ohmic value	Part No. Prefix Suffix	Wattage 1 2	Ohmic value	Part No. Prefix Suffix	Wattage 1 2	Ohmic value	Part No. Prefix Suffix	Wattage 1 2	Ohmic value	Part No. Prefix Suffix	Wattage 1 2	Ohmic value	Part No. Prefix Suffix	Wattage 1 2
3.3	33GKE	✓ ✓	27	270KE	✓ ✓	220	221KE	✓ ✓	1800	182KE	✓ ✓	15000	153KE	✓ ✓
3.9	39GKE	✓ ✓	33	330KE	✓ ✓	270	271KE	✓ ✓	2200	222KE	✓ ✓	18000	183KE	✓ ✓
4.7	47GKE	✓ ✓	39	390KE	✓ ✓	330	331KE	✓ ✓	2700	272KE	✓ ✓	22000	223KE	✓ ✓
5.6	56GKE	✓ ✓	47	470KE	✓ ✓	390	391KE	✓ ✓	3300	332KE	✓ ✓	27000	273KE	✓ ✓
6.8	68GKE	✓ ✓	56	560KE	✓ ✓	470	471KE	✓ ✓	3900	392KE	✓ ✓	33000	333KE	✓ ✓
8.2	82GKE	✓ ✓	68	680KE	✓ ✓	560	561KE	✓ ✓	4700	472KE	✓ ✓	39000	393KE	✓ ✓
10	100KE	✓ ✓	82	820KE	✓ ✓	680	681KE	✓ ✓	5600	562KE	✓ ✓	47000	473KE	✓ ✓
12	120KE	✓ ✓	100	101KE	✓ ✓	820	821KE	✓ ✓	6800	682KE	✓ ✓	56000	563KE	✓ ✓
15	150KE	✓ ✓	120	121KE	✓ ✓	1000	102KE	✓ ✓	8200	822KE	✓ ✓	68000	683KE	✓ ✓
18	180KE	✓ ✓	150	151KE	✓ ✓	1200	122KE	✓ ✓	10000	103KE	✓ ✓	82000	823KE	✓ ✓
22	220KE	✓ ✓	180	181KE	✓ ✓	1500	152KE	✓ ✓	12000	123KE	✓ ✓	100000	104KE	✓ ✓
														1 MEG —105KE ✓