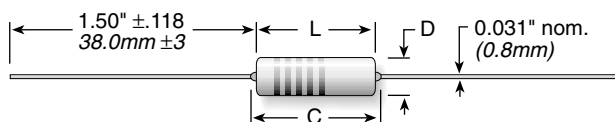


OX/OY Series

Ceramic Composition 10% Tolerance



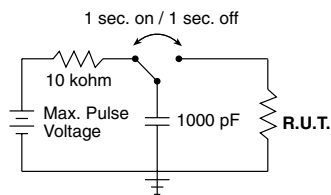
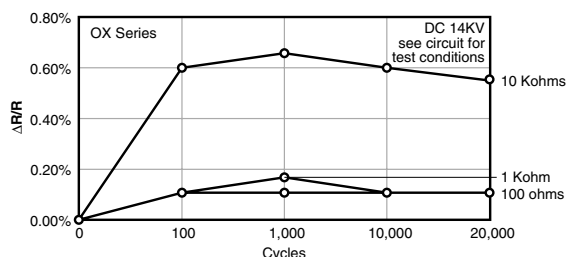
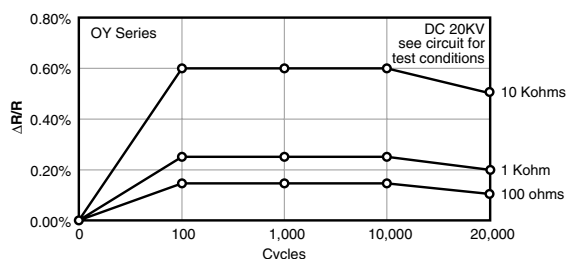
Series	Watts max.*	Resistance		Dimensions (in. / mm)			Joules max.**	Max Working volts	Qty. per reel
		min.	max.	Length L ±.039 (±1.0)	Length C max.	Diameter D ±.039 (±1.0)			
OX	1	3.3	100K	0.65 / 16.5	0.748 / 19.0	0.217 / 5.5	50	300	1000
OY	2	3.3	1M	0.748 / 19.0	0.886 / 22.5	0.276 / 7.0	80	400	500

* at 70°C. **For a single impulse.

* 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



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

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

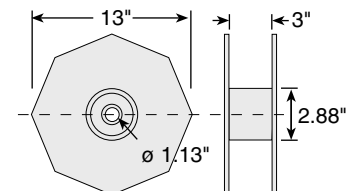
Electrical

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 ¹	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 ¹ 20,000 cycles	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%

¹See 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

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 ✓