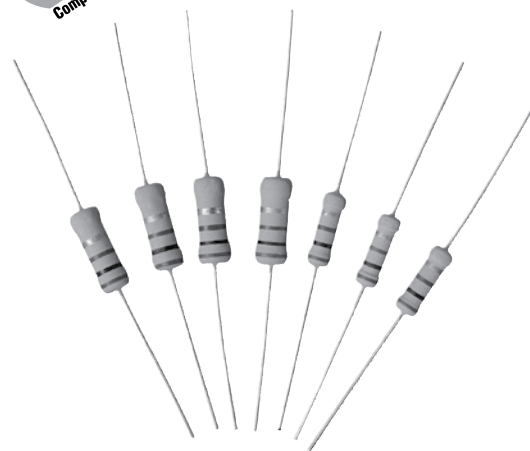


OX/OY Series

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.

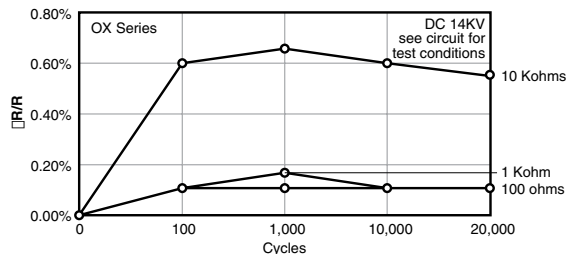
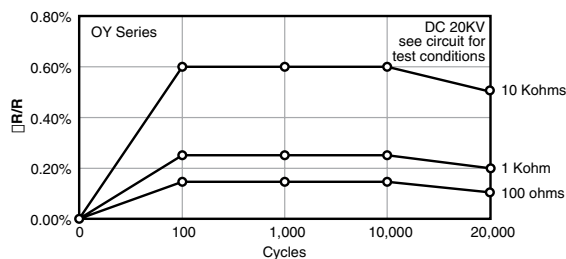
CHARACTERISTICS

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.

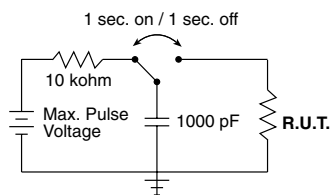
Test	Condition	Maximum ΔR
Life Test	MIL-STD-202, Method 108	±5%
Short Time Overload	2x rated V, 5 sec ON @ 70°C	±(2% +0.05Ω)
Resistance to Pulse¹	20,000 cycles. See circuit for test conditions	±5%
Thermal Shock	MIL-STD-202, Method 107	±(2% ±0.05Ω)
Moisture Resistance	1000 hrs @ 40°C, 90 - 95% RH	±5%

	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.

Resistance to Pulse



¹See figures



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

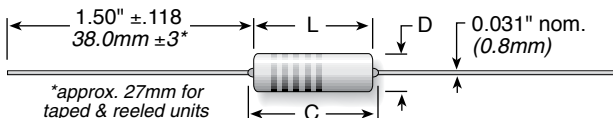
(continued)

OX/OY Series

Ceramic Composition
10% Tolerance

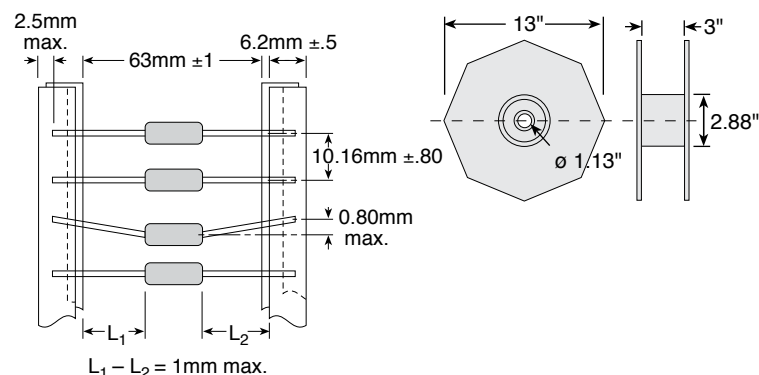
DIMENSIONS

in./mm



Series	Length L ±.039 (±1.0)	Length C max.	Diameter D ±.039 (±1.0)	Qty. per reel
OX	0.65 / 16.5	0.748 / 19.0	0.217 / 5.5	1000
OY	0.748 / 19.0	0.886 / 22.5	0.276 / 7.0	500

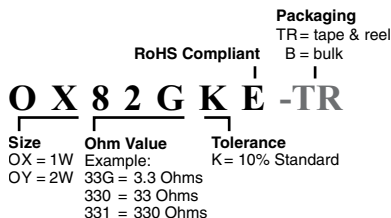
Tape and Reel Dimensions



ORDERING INFORMATION

Standard part numbers for OX/OY Series

Ohmic value	Part No.		Wattage	Ohmic value	Part No.		Wattage	Ohmic value	Part No.		Wattage	Ohmic value	Part No.		Wattage
	Prefix	Suffix			Prefix	Suffix			Prefix	Suffix			Prefix	Suffix	
3.3	OX	33GKE	✓	27	OX	270KE	✓	220	OX	221KE	✓	15000	OX	153KE	✓
3.9	OX	39GKE	✓	33	OX	330KE	✓	270	OX	271KE	✓	18000	OX	183KE	✓
4.7	OX	47GKE	✓	39	OX	390KE	✓	330	OX	331KE	✓	22000	OX	223KE	✓
5.6	OX	56GKE	✓	47	OX	470KE	✓	390	OX	391KE	✓	27000	OX	273KE	✓
6.8	OX	68GKE	✓	56	OX	560KE	✓	470	OX	471KE	✓	33000	OX	333KE	✓
8.2	OX	82GKE	✓	68	OX	680KE	✓	560	OX	561KE	✓	39000	OX	393KE	✓
10	OX	100KE	✓	82	OX	820KE	✓	680	OX	681KE	✓	47000	OX	473KE	✓
12	OX	120KE	✓	100	OX	101KE	✓	820	OX	821KE	✓	56000	OX	563KE	✓
15	OX	150KE	✓	120	OX	121KE	✓	1000	OX	102KE	✓	68000	OX	683KE	✓
18	OX	180KE	✓	150	OX	151KE	✓	1200	OX	122KE	✓	82000	OX	823KE	✓
22	OX	220KE	✓	180	OX	181KE	✓	1500	OX	152KE	✓	100000	OX	104KE	✓
															1 MEG —105KE ✓



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