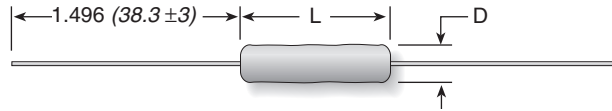


OX/OY Series

**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

SPECIFICATIONS

Material

Terminals: Solder-coated axial leads

Coating: UL-94 V0 approved silicone

Derating: Linear from 100% @ +70°C to 0% @ +200°C

Electrical

Tolerance: ±10% standard

Power Rating: Based on 70°C free air rating.

Temperature Coefficient: -1300± 300ppm/°C.

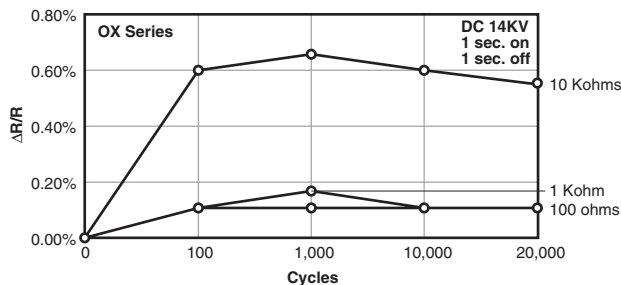
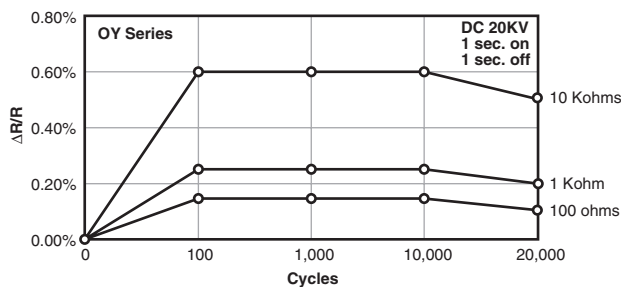
Series	Watts max.*	Resistance		Length L		Diameter D		Lead diameter	Joules max.**	Max Working volts
		min.	max.	max.						
OX	1	3.3	100K	0.67 / 17.0		0.217 ±.05/5.5±1		0.031 / 0.8	50	300
OY	2	3.3	1M	0.89 / 22.6		0.276 ±.05/7.0±1		0.031 / 0.8	80	400

* at 70°C. **For a single impulse.

STOCK PART NUMBERS FOR STANDARD RESISTANCE VALUES

Part Number			Part Number			Part Number			Part Number		
Ohms	1 Watt	2 Watt	Ohms	1 Watt	2 Watt	Ohms	1 Watt	2 Watt	Ohms	1 Watt	2 Watt
3.3	OX33GK	OY33GK	82	OX820K	OY820K	2,200	OX222K	OY222K	56,000	OX563K	OY563K
3.9	OX39GK	OY39GK	100	OX101K	OY101K	2,700	OX272K	OY272K	68,000	OX683K	OY683K
4.7	OX47GK	OY47GK	120	OX121K	OY121K	3,300	OX332K	OY332K	82,000	OX823K	OY823K
5.6	OX56GK	OY56GK	150	OX151K	OY151K	3,900	OX392K	OY392K	100,000	OX104K	OY104K
6.8	OX68GK	OY68GK	180	OX181K	OY181K	4,700	OX472K	OY472K	120,000	—	OY124K
8.2	OX82GK	OY82GK	220	OX221K	OY221K	5,600	OX562K	OY562K	150,000	—	OY154K
10	OX100K	OY100K	270	OX271K	OY271K	6,800	OX682K	OY682K	180,000	—	OY184K
12	OX120K	OY120K	330	OX331K	OY331K	8,200	OX822K	OY822K	220,000	—	OY224K
15	OX150K	OY150K	390	OX391K	OY391K	10,000	OX103K	OY103K	270,000	—	OY274K
18	OX180K	OY180K	470	OX471K	OY471K	12,000	OX123K	OY123K	330,000	—	OY334K
22	OX220K	OY220K	560	OX561K	OY561K	15,000	OX153K	OY153K	390,000	—	OY394K
27	OX270K	OY270K	680	OX681K	OY681K	18,000	OX183K	OY183K	470,000	—	OY474K
33	OX330K	OY330K	820	OX821K	OY821K	22,000	OX223K	OY223K	560,000	—	OY564K
39	OX390K	OY390K	1,000	OX102K	OY102K	27,000	OX273K	OY273K	680,000	—	OY684K
47	OX470K	OY470K	1,200	OX122K	OY122K	33,000	OX333K	OY333K	820,000	—	OY824K
56	OX560K	OY560K	1,500	OX152K	OY152K	39,000	OX393K	OY393K	1 MEG	—	OY105K
68	OX680K	OY680K	1,800	OX182K	OY182K	47,000	OX473K	OY473K			

RESISTANCE TO PULSE



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	1 sec ON, 1 sec OFF	±5%
Thermal Shock	MIL-STD-202, Method 107	±(2% ± 0.05 ohm)
Moisture Resistance	1000 hrs @ 40°C, 90 - 95% RH	±5%

¹Related text, see figures left