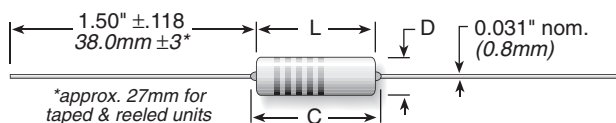


OX/OY Series



Ceramic Composition 10% Tolerance



Series	Watts max.*	Resistance		Dimensions (in. / mm)		Diameter D ±.039 (±1.0)	Joules max.**	Max Working volts	Qty. per reel
		min.	max.	Length L ±.039 (±1.0)	Length C 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.

FEATURES

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

SPECIFICATIONS

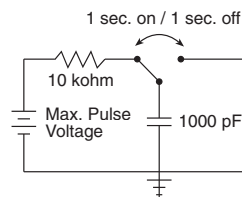
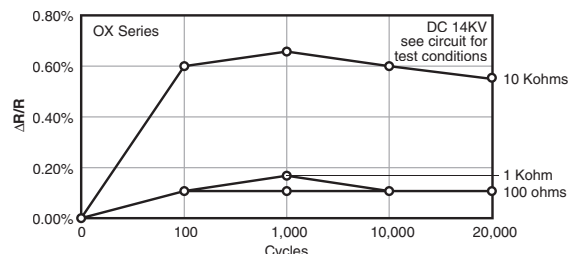
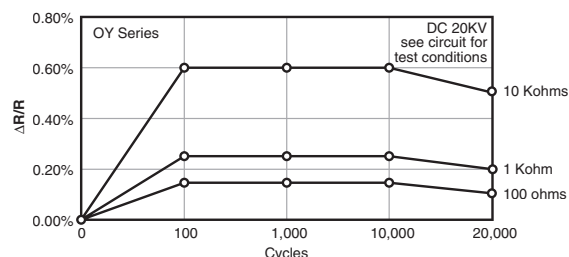
Material
Terminals: Pb-free solder-coated axial
Coating: Silicone ceramic
Derating: Linear from 100% @ +70°C to 0% @ +200°C
Operating Temp. Range: -40°C to +220°C
Electrical
Tolerance: ±10% standard
Power Rating: Based on 70°C free air rating.
Temperature Coefficient: -1300 ±300ppm/°C.

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.

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.

RESISTANCE TO PULSE

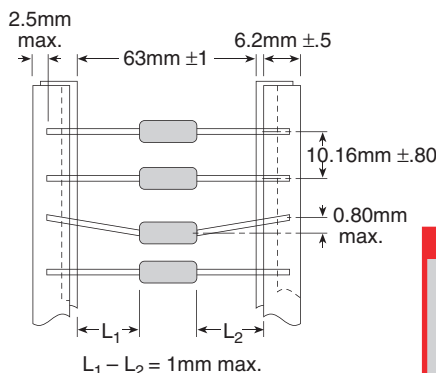


14KV and 20KV values used in circuit as shown; full voltage not applied directly to resistor.

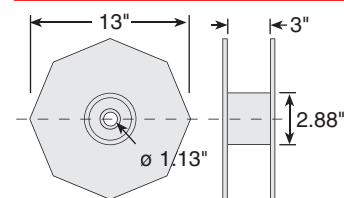
Test	Condition	Maximum ΔR
Life Test	MIL-STD-202, Method 108	±5%
Short Time Overload	2x rated V, 5 sec ON @ 70°C	±(2% + 0.05ohm)
Resistance to Pulse ¹ 20,000 cycles	see circuit for test conditions	±5%
Thermal Shock	MIL-STD-202, Method 107	±(2% ± 0.05 ohm)
Moisture Resistance	1000 hrs @ 40°C, 90 - 95% RH	±5%

¹See figures, left

TAPE DIMENSIONS



REEL DIMENSIONS



ORDERING INFORMATION

RoHS Compliant | Tape & reel optional

OX82GKE-TR

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

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 ✓ ✓