



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 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

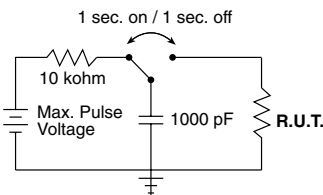
\* at 70°C. \*\*For a single impulse.

### CHARACTERISTICS

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

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

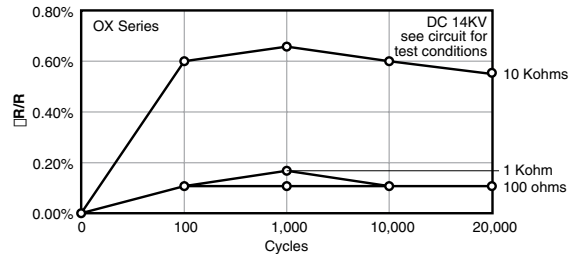
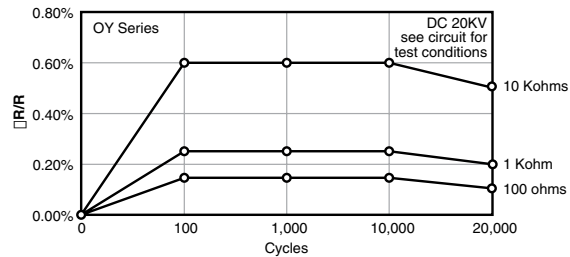
<sup>1</sup>See figures



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

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

### Resistance to Pulse



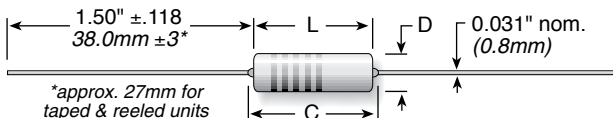
(continued)

# OX/OY Series

Ceramic Composition  
10% Tolerance

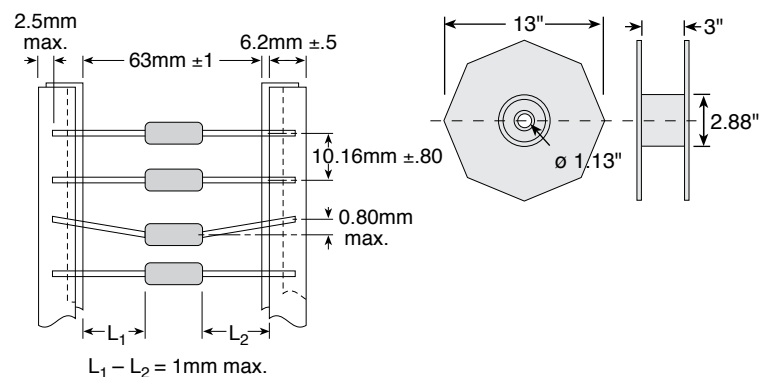
## DIMENSIONS

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. 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 ✓ ✓

