

# Ultra-Mox Series

High Voltage, Thick Film



## FEATURES

- High voltage resistors in thick film technology
- Radial leads, variable lead spacing by bending
- Climatic protection by silicone coating
- Special versions possible
- Resistance values up to 10 teraohm
- Low values of TCR and VCR

## SERIES SPECIFICATIONS

Series	Power Rating	Working Voltage	Resistance Range	Tolerance	TCR	VCR
UM025	1.0	15KV	1M-100M	0.25-10%	25, 50, 100	1ppm/V
			>100M-1G	1-20%	50, 100, 250	2ppm/V
			>1G-100G	5-30%	250, 500	10ppm/V
			>100G-1T	5-30%	500, 1000	50ppm/V
UM030	1.0	10KV	1M-100M	0.25-10%	25, 50, 100	2ppm/V
			>100M-1G	1-20%	50, 100, 250	5ppm/V
			>1G-100G	5-30%	250, 500	20ppm/V
			>100G-1T	5-30%	500, 1000	100ppm/V
UM040	1.2	20KV	1M-100M	0.25-10%	25, 50, 100	1ppm/V
			>100M-1G	1-20%	50, 100, 250	2ppm/V
			>1G-100G	5-30%	250, 500	10ppm/V
			>100G-1T	5-30%	500, 1000	50ppm/V
UM050	3.0	30KV	1M-100M	0.25-10%	25, 50, 100	1ppm/V
			>100M-1G	1-20%	25, 50, 100	1ppm/V
			>1G-100G	5-30%	100, 250	5ppm/V
			>100G-1T	5-30%	250, 500	25ppm/V
			>1T-10T	10-30%	on request	

Closer tolerance, TCR and VCR, other dimensions, and voltage dividers, on request.

## CHARACTERISTICS

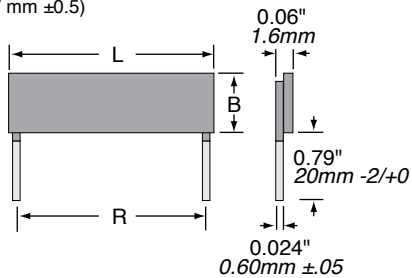
<b>Continuous operating voltage</b>	$V=\sqrt{P \cdot R}$
<b>Measuring voltage</b>	Standard measuring voltage is 10V (50V for values >1G). Different voltages on request.
<b>TCR</b>	in ppm/K; Temperature range +25°C ... +125°C; TCR25/50 and values above 1G: +25°C ... +85°C
<b>Operating temp. range</b>	-55°C ... +125°C
<b>Climatic category</b>	to EN 60068-1: 55/125/56
<b>Humidity-/contact protection</b>	Lacquer coating. Resistant to most solvents. Isopropyl alcohol recommended for cleaning; do not use acetone or methylene chlorolide. Avoid mechanical stress to coating.
<b>Stability: Storage</b>	(125°C/1000h) ≤10G: <1%; >10G: <2%
<b>Stability at Max. voltage</b>	(Max. voltage/1000h) ≤10G: <1%; >10G: <2%

# Ultra-Mox Series

## High Voltage, Thick Film

### DIMENSIONS

(in. / mm  $\pm 0.5$ )



Series	L	B	R
UM025	0.98"/25.0	0.35"/9.0	0.90"/22.9
UM030	1.18"/30.0	0.24"/6.0	1.09"/27.7
UM040	1.57"/40.0	0.24"/6.0	1.49"/37.8
UM050	1.97"/50.0	0.49"/12.5	1.88"/47.8

Lead spacing may be changed by bending

Other wire diameters and thicknesses available

Axial versions, versions with formed leads and versions with lead frames are available

### ORDERING INFORMATION

RoHS Compliant

Ultra-mox High voltage radial lead	Style	TCR (ppm)	Ohms	Tolerance
U	M	0	5	T
			1	0
			0	4
				J
				E

W = 25  
 V = 50  
 T = 100  
 Z = 250  
 E = 500  
 N = 1000  
 U = 2000

1004 = 1MΩ  
 1006 = 100M  
 1009 = 100G  
 100A = 1T  
 100B = 10T

D = 0.50%  
 F = 1%  
 G = 2%  
 J = 5%  
 K = 10%  
 M = 20%  
 P = 30%

#### Standard Part Numbers

UM030T1006FE	UM040Z1009JE
UM030Z1007FE	UM040E100AJE
UM030Z1008JE	UM050V1006FE
UM030Z1009JE	UM050V1007FE
UM030E100AJE	UM050T1008JE
UM040T1006FE	UM050T1009JE
UM040Z1007FE	UM050Z100AJE
UM040Z1008JE	UM050E100BKE