

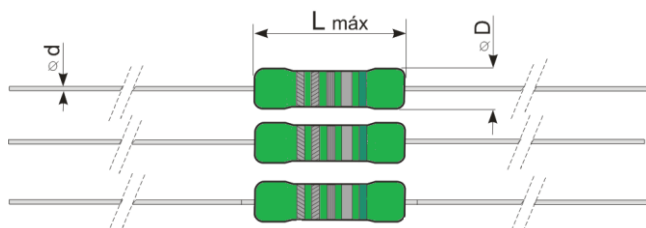
**Power Metal Oxide Film Resistors**  
**Flameproof coating, UL 94 - V0**  
**General Propose**



ELECTRICAL SPECIFICATIONS						
Type		PO595-0	PO594-0	PO593-0	PO590-0	PO591-0
Style		0207	0410	0414	0617	0922
Nominal Power rating $P_{70}$	[W]	1	2	3	4	
Resistance range	[ $\Omega$ ]	0R1...10M	0R1...10M	0R22...10M	0R22...560K	0R22...100K
E-Series		E24,E96		E24,E48	E24,E96	
Tolerances	[%]	$\pm 1, \pm 5$		$\pm 2, \pm 5$		
Temperature coefficient	[ $10^{-6} \cdot K^{-1}$ ]	SEE NEXT PAGE				
Temperature range	[ $^{\circ}C$ ]	-55...+200	-55...+235		-55...+250	
Thermal resistance	[ $KW^{-1}$ ]	125	80	80	60	45
Insulation voltage (1min.) IEC115-1 clause 2.2.17	[V]	500				

PERFORMANCE DATA						
Max. working voltage IEC115-1 clause 2.2.16	[V] <sub>RMS</sub>	500			750	
Derating linear IEC115-1 clause 2.2.24	[ $^{\circ}C$ ]	SEE NEXT PAGE				
Climatic category IEC68-1		55/200/56				
Failure Rate (Total, $\vartheta_o$ , max, 60% cont. lev.)	[ $10^{-9} h^{-1}$ ]	<10				
Endurance ( $P_{70}$ 70 $^{\circ}C$ , 1000h) IEC115-1 clause 4.25	[ $\Delta R/R$ ] %	$\pm 2,0$			$\pm 1,5$	
Damp heat, steady state (40 $^{\circ}C$ , 93% r.h., 56d) IEC115-1 clause 4.24	[ $\Delta R/R$ ] %	$\pm 2,0$			$\pm 1,5$	
Climatic sequence IEC115-1 clause 4.23	[ $\Delta R/R$ ] %	$\pm 1,0$				
Terminal strength	[ $\Delta R/R$ ] %	$\pm 0,3$				
Terminal Tensile Strength	[N]	40				
Resistance to soldering heat (260 $^{\circ}C$ , 3,5s) IEC115-1 clause 4.12	[ $\Delta R/R$ ] %	$\pm 0,25$				
Solderability IEC 60068-2-20-T	[s]	2,5 Flowtime; solderglobule test				
Current noise IEC 195	[db]	R <15K: -15 R>: 15 +10 /decade				
Nonlinearity IEC 440	[db]	R <15K: 110 R> 15 K: 110 -20 /decade				
Marking		colour code, 4/5/6 bands			printed in clear	

## DIMENSIONS [mm]

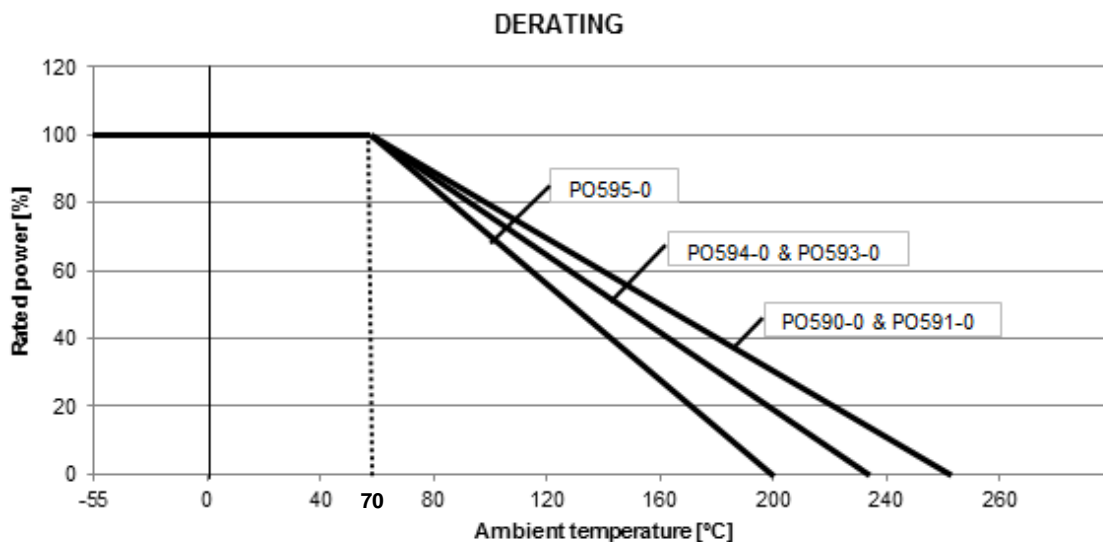


Type	L max	∅ D max	∅ d
PO595-0	6,3 ±0,5	2,4 ±0,2	0,6 -0,1
PO594-0	9,0 ±0,5	3,9 ±0,3	0,6 -0,1
PO594-0	11,5 ±1,0	4,5 ±0,5	0,8 ±0,05
PO590-0	16,5 -1,5	6,0 -0,5	0,8 ±0,05
PO591-0	20 -1	9,0 -0,5	0,8 ±0,05

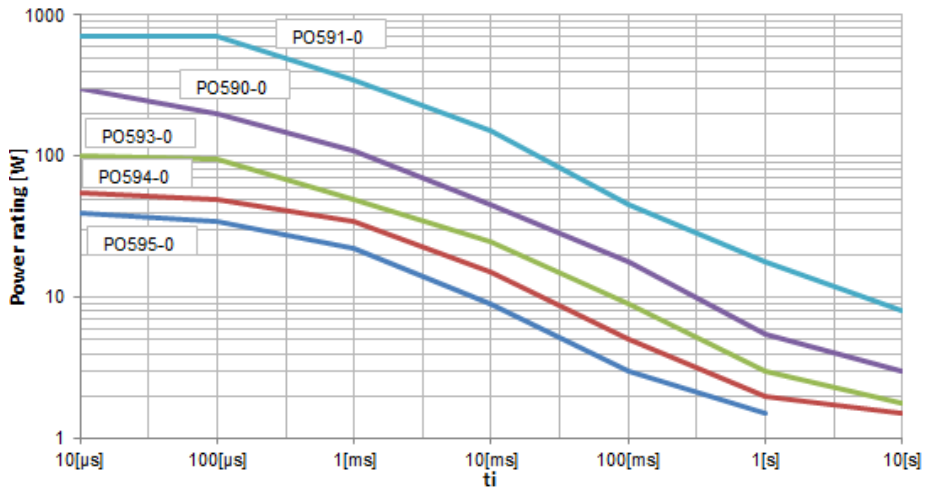
## TEMPERATURE COEFFICIENT

PO595-0 R-Value	PO594-0 R-Value	PO593-0 R-Value	PO590-0 R-Value	PO591-0 R-Value	E-series	Tolerance	TC [10 <sup>-6</sup> K <sup>-1</sup> ]
-----	-----	0R22 ... 10M	0R22 ... 560K	0R22 ... 100K	E 24	± 5%	± 200
0R1 ... 10M	0R1 ... 10M	-----	-----	-----	E 24	± 5%	± 100
-----	-----	1R ... 1M	1R ... 100K	1R ... 68K	E 24 / E 48	± 2%	± 200
1R ... 10M	1R ... 10M	-----	-----	-----	E 24 / E 96	± 1%	± 50

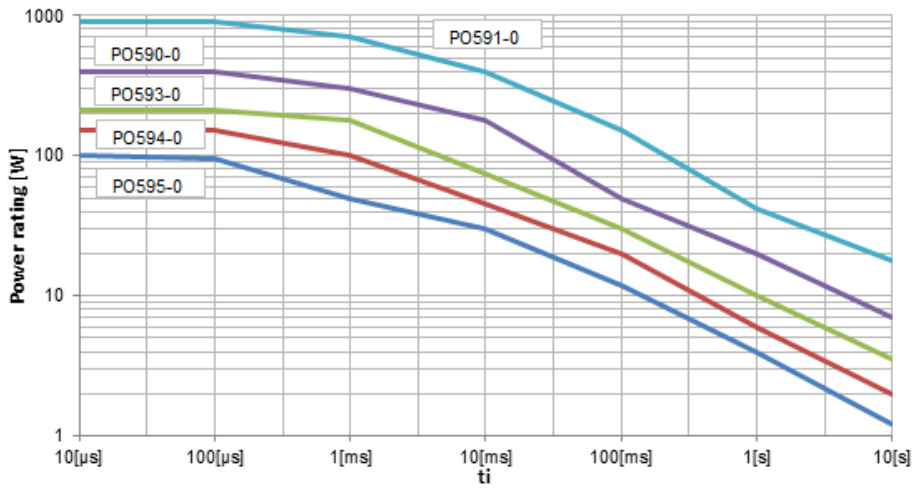
## PERFORMANCE GRAPH'S



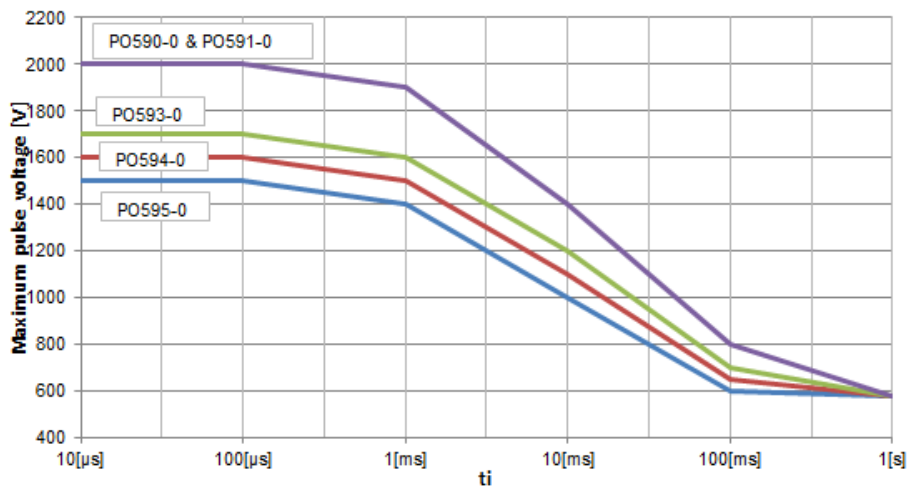
**PULSE RATING  $P \leq P70$  ( $R \geq 10[\Omega]$ )**



**PULSE RATING  $P \rightarrow 0$  ( $R \geq 10[\Omega]$ )**

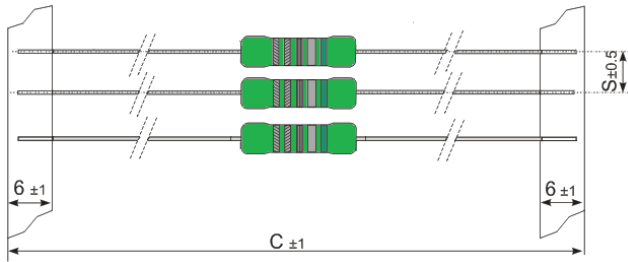


**MAXIMUM PULSE VOLTAGE**



**PACKAGING**

The standard packaging for PO in axial type is taped, dimensions below.



Type	Packaging	Packing style	Pieces
PO595-0	Taped/Ammopack	T	5000
PO594-0	Taped/Ammopack	T	1000
PO593-0	Taped/Ammopack	T	1000
PO590-0	Taped/Ammopack	T	1000
PO591-0	Taped/Ammopack	T	500

**ALTERNATIVE LEAD CONFIGURATIONS**

This type PO, is also available in a different pre-forming, as shown below, other's upon request.

SMD – Z Form	Radial	Radial Kink	Axial	Axial Kink

\*For horizontal and vertical pre-forming please consult your local sales contact.

**ORDERING EXAMPLE**

PO595-0	5	T	150R
Type	Tolerance	Pack-Code	R-Value