

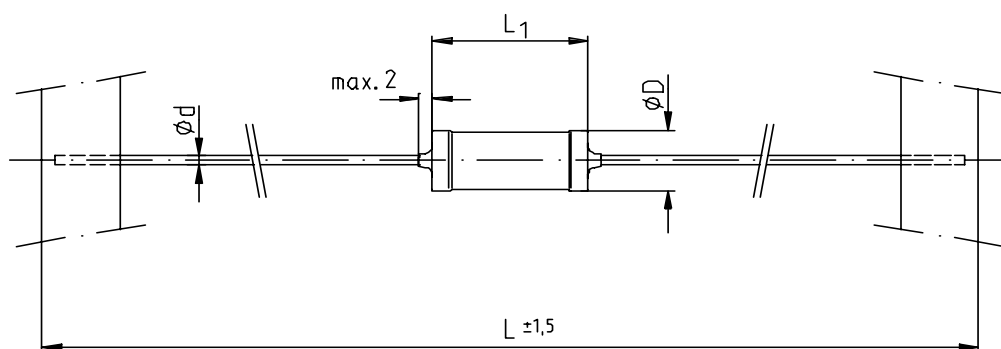
Power Metaloxide film resistor
flame retardant



Specifications

Type		PO595-0	PO593-0	PO590-0	PO591-0
Style		0207	0414	0617	0922
Power rating P_{70}	W	1	2	3	4
Resistance range	Ω		see next page		
E-Series			see next page		
Tolerances	%		see next page		
Temperature coefficient	$10^{-6} \cdot K^{-1}$		see next page		
max. cont. work. voltage	V_{RMS}	500			750
Voltage coefficient	$10^{-6} V^{-1}$		< 3		
Insulation voltage (1min.)	V_{RMS}		500		
Insulation resistance	Ω		> $10^3 M$		
Derating	$^{\circ}C$		linear 70 ... 250 (0W)		
Climatic category			55/200/56		
Temperature range	$^{\circ}C$		- 55 ... 250		
Thermal resistance	KW^{-1}	<140	<130	<70	<60
Failure rate (Total, ϑ_o , max., 60% conf. lev.)	$10^{-9} \cdot h^{-1}$		< 10		
Endurance (P_{70} , @70 $^{\circ}C$, 1000h, interm.)	$\left[\frac{\Delta R}{R}\right]$ %	$\pm 1,5$	$\pm 1,5$	$\pm 1,5$	$\pm 1,5$
Damp heat, steady state (40 $^{\circ}C$, 93% r.h., 56d)	$\left[\frac{\Delta R}{R}\right]$ %		$\pm 1,5$		
Climatic sequence	$\left[\frac{\Delta R}{R}\right]$ %		$\pm 1,0$		
Terminal strength	$\left[\frac{\Delta R}{R}\right]$ %		$\pm 0,3$		
Terminal tensile strength	N		40		
Resistance to soldering heat (260 $^{\circ}C$, 10s)	$\left[\frac{\Delta R}{R}\right]$ %		$\pm 0,25$		
Solderability	s	2,5 Flowtime; solderglobule test IEC 60068-2-20-T			
Current noise (DIN/IEC 195)	dB	R < 15K: -15 R>: 15 + 10/decade			
Nonlinearity (DIN/IEC 440)	dB	R < 15K: 110 R> 15 K: 110 -20/decade			
Marking		595/593: DIN-IEC-colour code, 4/5 bands 590/591: printed in clear			

Dimensions in mm:



PO595-0 Resistance range	PO593-0 Resistance range	PO590-0 Resistance range	PO591-0 Resistance range	E-series	Tolerance	TC 10^{-6} K^{-1}
0R22 ... 10M	0R22 ... 10M	0R22 ... 560K	0R22 ... 100K	E 24	$\pm 5\%$	± 200
-	1R ... 1M	1R ... 100K	1R ... 68K	E 48	$\pm 2\%$	± 200
1R ... 1M	-	-	-	E 96	$\pm 1\%$	± 50

Type	L_1 [mm]	$\varnothing D$ [mm]	$\varnothing d$ [mm]	$L \pm 1,5$ [mm]	Inside tape [mm]
PO595-0	6,3 -1	2,5 -0,5	0,6 $\pm 0,02$	65	52
PO593-0	12 -1,5	4,1 -0,5	0,8 $\pm 0,02$	85	73
PO590-0	16,5 -1,5	6,0 -0,5	0,8 $\pm 0,02$	95	77
PO591-0	20 -1	9,0 -0,5	0,8 $\pm 0,02$	95	77

Packaging:

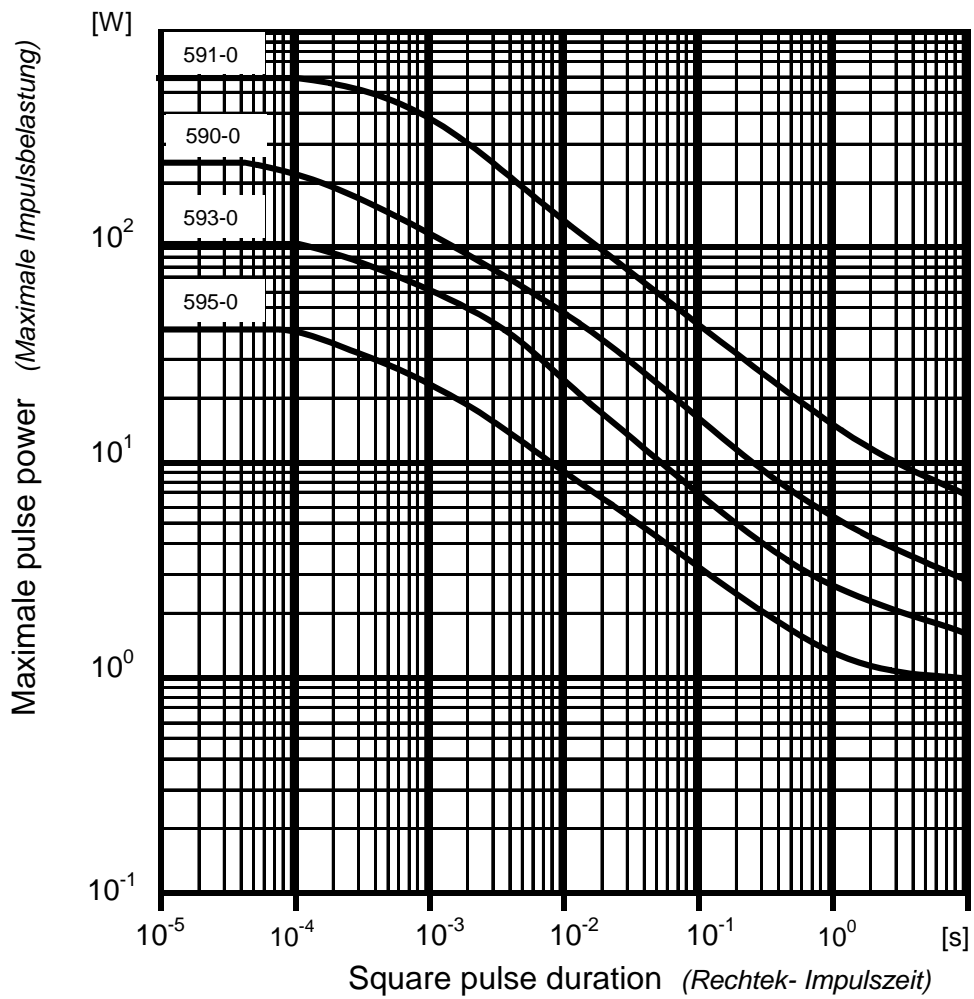
Type	Packaging	Pieces	Pack.-Code
PO595-0	taped/Ammopack	2000	T
PO593-0	taped/Ammopack	1000	T
PO590-0	taped/Ammopack	1000	T
PO591-0	taped/Ammopack	500	T

Ordering example: PO593-0 5 T 10K
 Type Tolerance Pack.-Code R-Value

Pulse power

Diagram 1

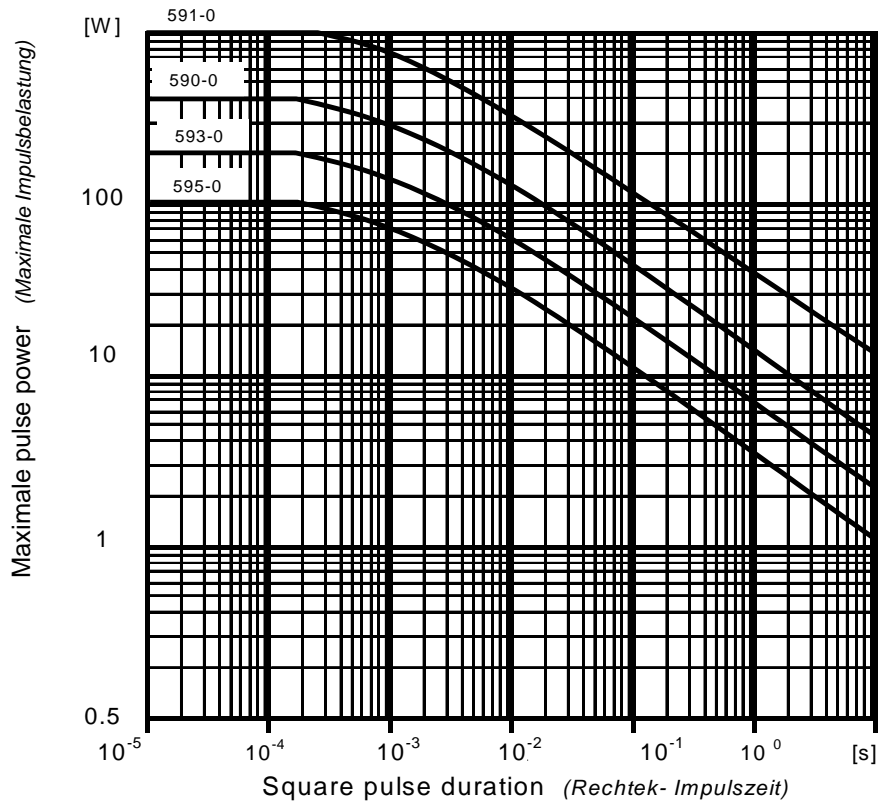
pulse power $\bar{P} \leq P_{70}$, $\theta_u 70^\circ\text{C}$, $R \geq 10 \Omega$, U_{max} . see Diagram 3
 Impulsbelastung $\bar{P} \leq P_{70}$, $\theta_u 70^\circ\text{C}$, $R \geq 10 \Omega$, U_{max} . siehe Diagramm 3



Single pulse

Diagram 2

Single pulse $\bar{P} \rightarrow 0, 9u 70^{\circ}C, R \geq 10 \Omega, U_{max}$. See Diagram 3
 Einzelimpulse $\bar{P} \rightarrow 0, 9u 70^{\circ}C, R \geq 10 \Omega, U_{max}$. Siehe Diagramm 3



Pulse voltage

Diagram 3

Pulse voltage $9u \leq 70^{\circ}C$
 Impulsspannung $9u \leq 70^{\circ}C$

