



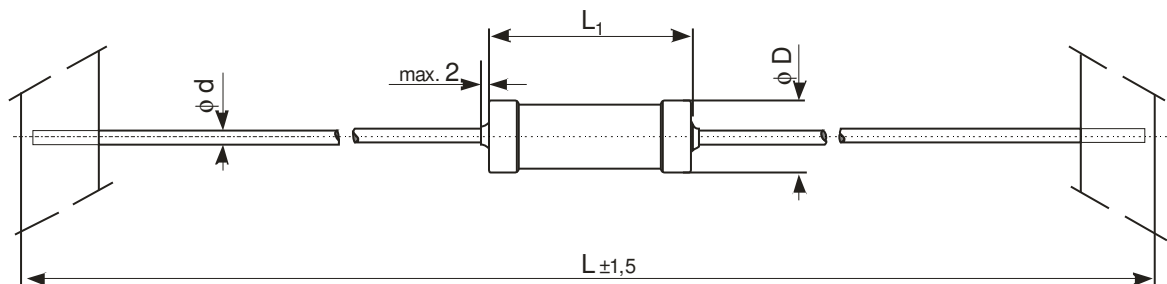
Power Metaloxide film resistor

Flame retardant

Specifications

Type		PO595-0	PO593-0	PO590-0	PO591-0
Style		0207	0414	0617	0922
Nominal 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. working 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, Linear, 70....	$^{\circ}C$	200	235	250	250
Climatic category		55 / 200 / 56			
Temperature range	$^{\circ}C$	- 55 ... 200	- 55 ... 235	- 55 ... 250	- 55 ... 250
Thermal resistance	KW^{-1}	125	80	60	45
Failure rate (Total ϑ_0 max, 60% conf. lev.)	$10^{-9} \cdot h^{-1}$	<10			
Endurance (P_{70} , @ 70 $^{\circ}C$, 1000h intem.)	$[\Delta R/R] \%$	$\pm 2,0$	$\pm 2,0$	$\pm 1,5$	$\pm 1,5$
Damp heat, steady state (40 $^{\circ}C$, 93% r.h., 56d)	$[\Delta R/R] \%$	$\pm 2,0$	$\pm 2,0$	$\pm 1,5$	$\pm 1,5$
Climatic sequence	$[\Delta R/R] \%$	$\pm 1,0$			
Terminal Strength	$[\Delta R/R] \%$	$\pm 0,3$			
Terminal tensile Strength	N	40			
Resistance to soldering heat (260 $^{\circ}C$, 10s.)	$[\Delta R/R] \%$	$\pm 0,25$			
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, 4/5/6 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}
0R1 ... 10M	0R22 ... 10M	0R22 ... 560K	0R22 ... 100K	E 24	$\pm 5\%$	± 200
-----	1R ... 1M	1R ... 100K	1R ... 68K	E 24 / E 48	$\pm 2\%$	± 200
1R ... 1M	-----	-----	-----	E 24 / E 96	$\pm 1\%$	± 50

Type	L1 [mm]	$\varnothing D$ [mm]	$\varnothing d$ [mm]	L $\pm 1,5$ [mm]	Inside tape [mm]
PO595-0	$6,3 \pm 0,5$	$2,4 \pm 0,2$	$0,6 -0,1$	65	52
PO593-0	$11,5 \pm 1,0$	$4,5 \pm 0,5$	$0,8 \pm 0,02$	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	Packing style	Pieces
PO595-0	Taped/Ammopack	T	5000
PO593-0	Taped/Ammopack	T	1000
PO590-0	Taped/Ammopack	T	1000
PO591-0	Taped/Ammopack	T	500

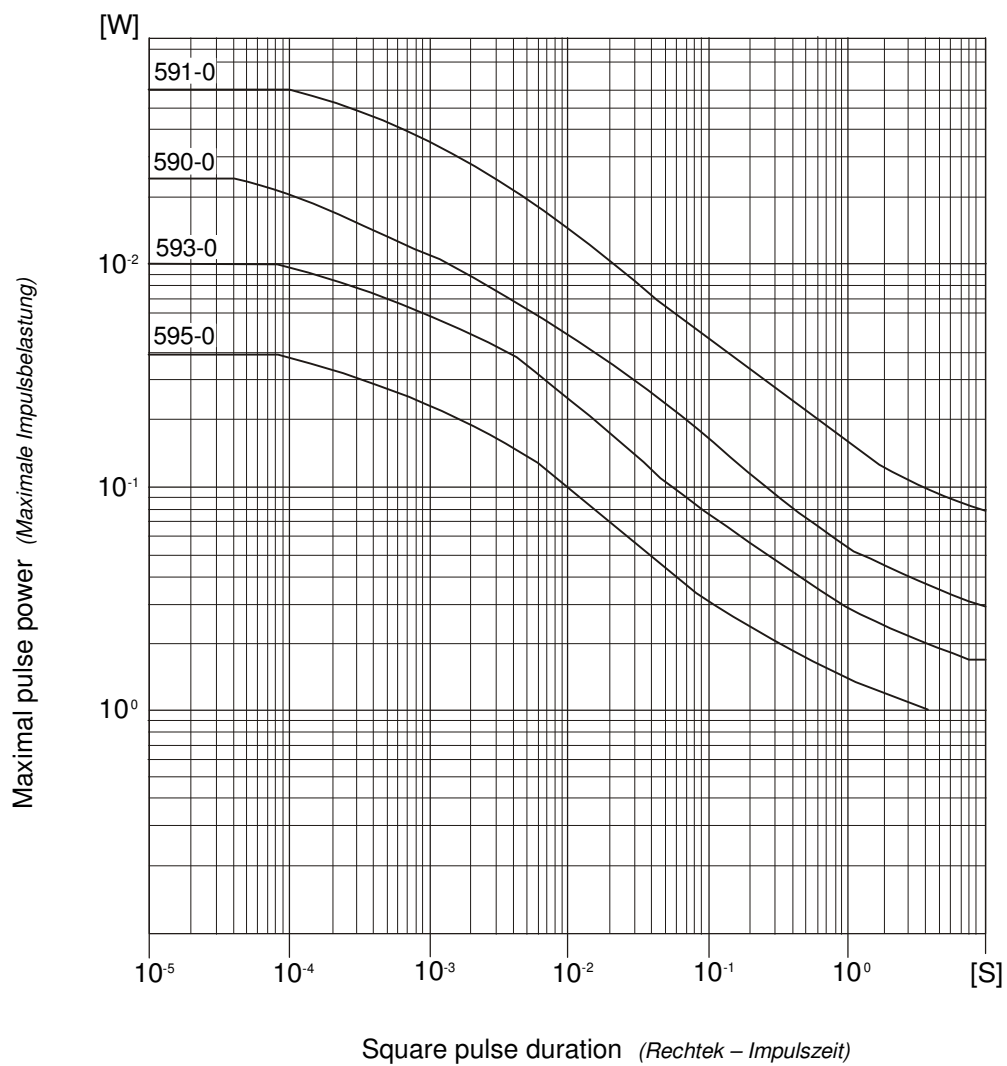
Ordering example: PO593-0 5 T 15R
 Type Tolerance Pack.-Code R- value

Pulse Power

Diagram 1

pulse power $\bar{P} \leq P_{70}$, ϑ_0 70°C, $R \geq 10 \Omega$, U_{max} . see Diagram 3

Impulsbelastung $P \leq P_{70}$, ϑ_0 70°C, $R \geq 10 \Omega$, U_{max} . Siehe Diagramm 3

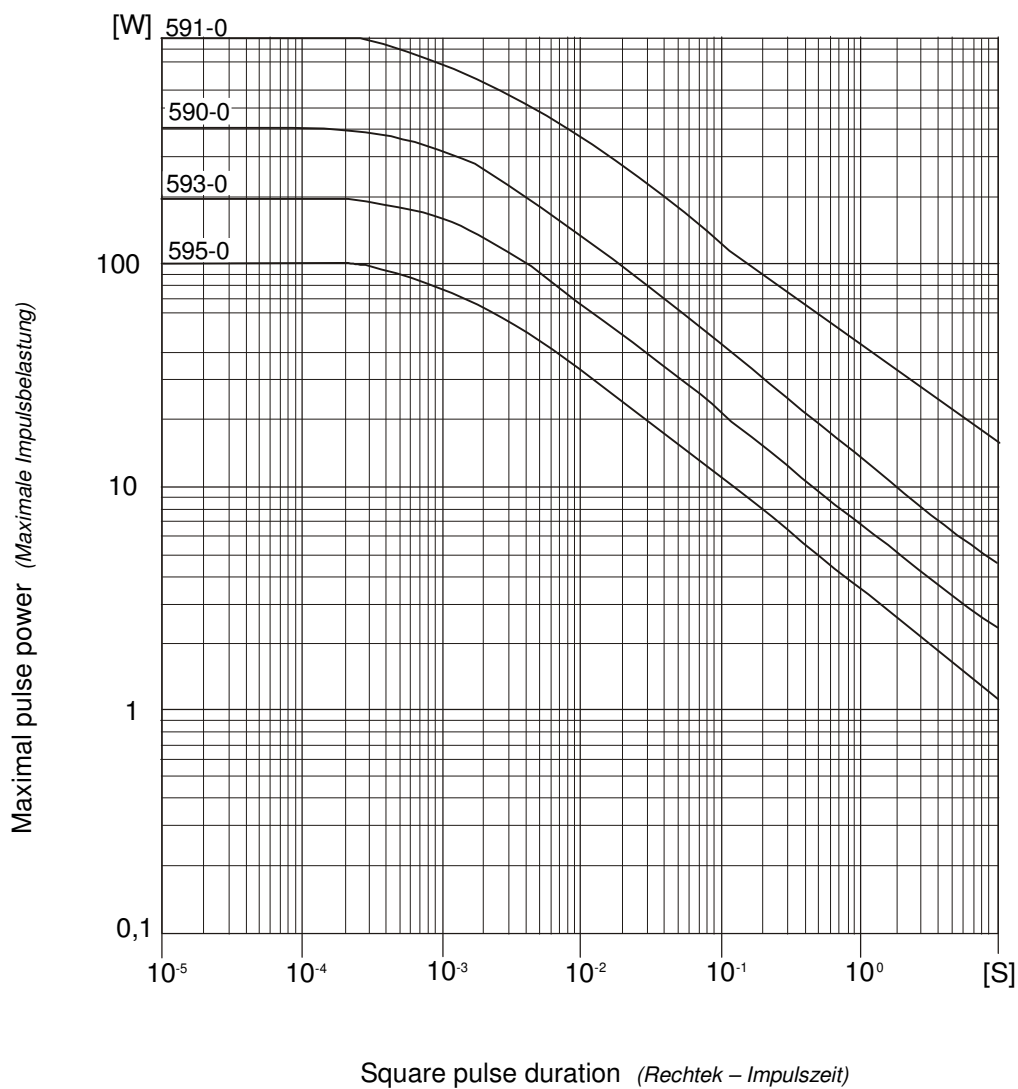


Single Pulse

Diagram 2

Single pulse $P \rightarrow 0$, $\vartheta_{\text{v}} 70^{\circ}\text{C}$, $R \geq 10 \Omega$, U_{max} . see Diagram 3

Einzelimpulse $P \rightarrow 0$, $\vartheta_{\text{v}} 70^{\circ}\text{C}$, $R \geq 10 \Omega$, U_{max} . Siehe Diagramm 3



Pulse voltage

Diagram 3

Pulse voltage $\vartheta_v \leq 70^\circ\text{C}$
(Impulsspannung $\vartheta_v \leq 70^\circ\text{C}$)

