

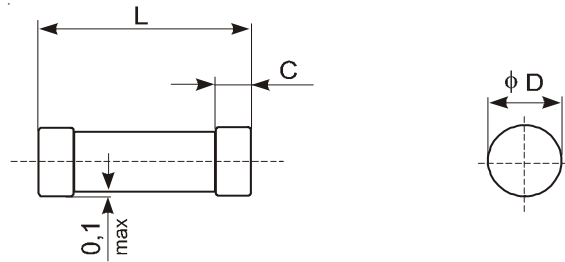
SMD-Metal Film Resistors
MELF Style

Specifications

Type		ZC0204	ZC0207
Style		0204	0207
Power rating P_{70}	W	0,25 (0,4W for min. 8.000h)	1,0
Resistance range	Ω	see next page	
E-Series		see next page	
Tolerances	%	see next page	
Temperature coefficient	$10^{-6} * K^{-1}$	see next page	
max. cont. work. voltage	V_{RMS}	200	500
Voltage coefficient	$10^{-6} * V^{-1}$	< 1	
Insulation voltage (1min.)	V_{RMS}	300	500
Insulation resistance	Ω	> 10^4 M	> 10^4 M
Derating	$^{\circ}C$	linear 70 ... 155 (0W)	linear 70 ... 155 (0W)
Climatic category		55/155/56	55/155/56
Temperature range	$^{\circ}C$	- 55 ... 155	- 55 ... 155
Thermal resistance	KW^{-1}	200	85
Pad size / cut-layer	mm	1,5 x 1,5 / 35 μ	5,5 x 5,5 / 70 μ
Failure rate (Total, ϑ_0 max., 60% conf. lev.)	$10^{-9} h^{-1}$	< 10	< 5
Endurance (P_{70} , @ 70 $^{\circ}C$, 1000h interm.)	%	$\pm 0,25$	$\pm 1,5$
Damp heat, steady state (40 $^{\circ}C$, 93% r.h., 56d)	$\left[\frac{AR}{R}\right]$ %	$\pm 0,25$	$\pm 0,5$
Climatic sequence	%	$\pm 0,1$	
Terminal strength	$\left[\frac{AR}{R}\right]$ %	Board-bend test CECC 00802; 10 x 2 mm	
Resistance to soldering heat (260 $^{\circ}C$, 10s)	%	$\pm 0,1$	$\pm 0,25$
Solderability	$\left[\frac{AR}{R}\right]_S$	Solder-bath test CECC 00802, 95% wetting	
Current noise (DIN/IEC 195)	dB	R<10K: -25 R>10K: -25 + 8 / decade	
Nonlinearity (DIN/IEC 440)	dB	110	
OR0 (Jumper) Current rating		2A ($R_{max} = R015$)	
Marking		DIN-IEC-Colour code, 5 bands	

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Dimensions in mm:



Resistance range ZC0207	Resistance range ZC0204	Tolerance	Temperature coefficient	E-Series
0R16 ... 0R2	0R22 ... 0R91	± 5%	$100 \cdot 10^{-6} \text{ K}^{-1}$	E 24
0R22 ... 0R91	0R51 ... 0R91	± 2%	$100 \cdot 10^{-6} \text{ K}^{-1}$	E 24
1R ... 10M	1R ... 10M	± 1%	$50 \cdot 10^{-6} \text{ K}^{-1}$	E 24/E96
1R ... 2M2	10R ... 475K	± 0,5%	$50 \cdot 10^{-6} \text{ K}^{-1}$	E 24/E96
-	10R ... 475K	± 0,5%	$25 \cdot 10^{-6} \text{ K}^{-1}$	E 24/E96
-	10R ... 221K	± 0,5%	$15 \cdot 10^{-6} \text{ K}^{-1}$	E 24/E96
10R ... 1M	22R ... 330K	± 0,25%	$25 \cdot 10^{-6} \text{ K}^{-1}$	E 24/E96
-	22R ... 221K	± 0,25%	$15 \cdot 10^{-6} \text{ K}^{-1}$	E 24/E96
100R ... 511K	43R ... 330K	± 0,1%	$25 \cdot 10^{-6} \text{ K}^{-1}$	E 24/E96
-	43R ... 221K	± 0,1%	$15 \cdot 10^{-6} \text{ K}^{-1}$	E 24/E96

Tolerance	Coding	Temperature coefficient	Coding	Coating
5%	J	100	F	light green
2%	G	50	E	light green
1%	F	25	D	pink
0,5%	D	15	C	violett
0,25%	C			
0,1%	B			

Typ	L	C	∅ D max.
ZC0204	3,6 -0,2	0,5 + 0,35	1,4
ZC0207	5,8 -0,3	0,9 ± 0,30	2,2

Packaging:

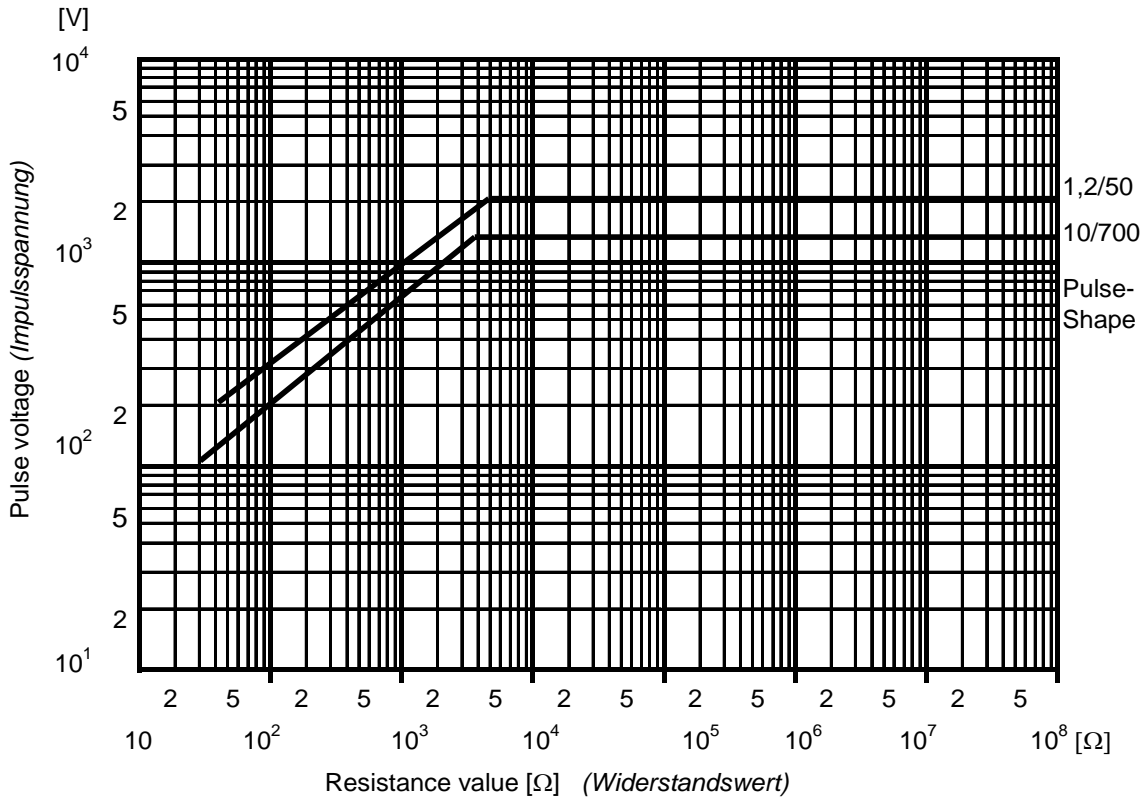
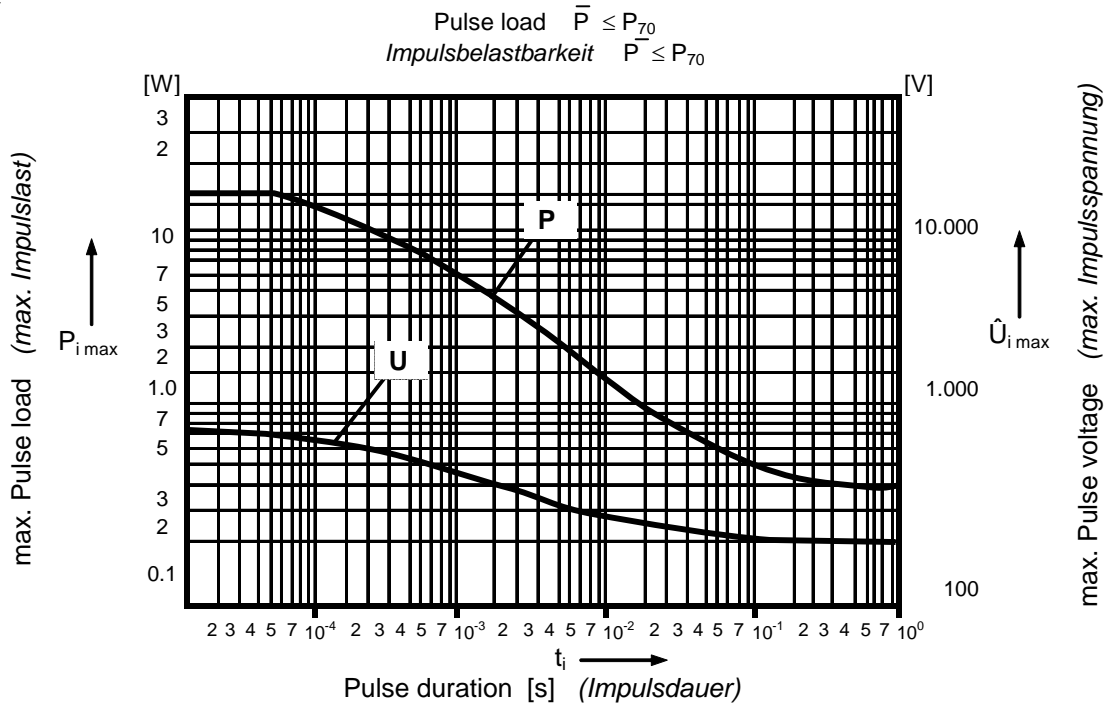
Type	Packaging	Pieces	Tolerance
ZC0204	8mm Blistertape 7 inch	3000	all
	8mm Blistertape 13 inch	10000	all
ZC0207	12mm Blistertape 7inch	1500	all

Ordering example:

ZC0204	F	K	E	07	1K
0-0hm = ZC0204	F	K	E	07	0R
Type	Tolerance	Blister Tape	TC	Reel Diameter	R-Value

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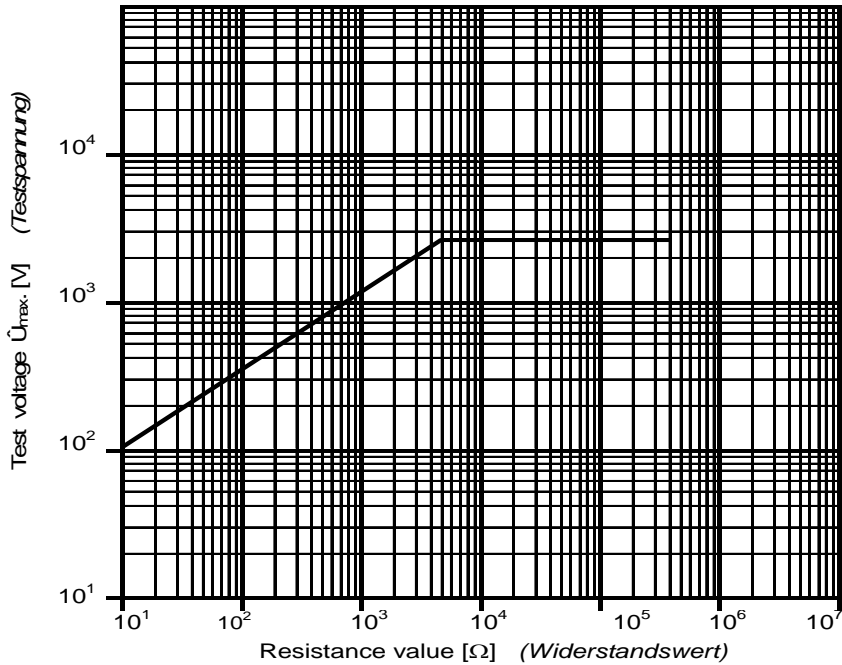
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max. Pulse rating (max. Impulsbelastbarkeit)

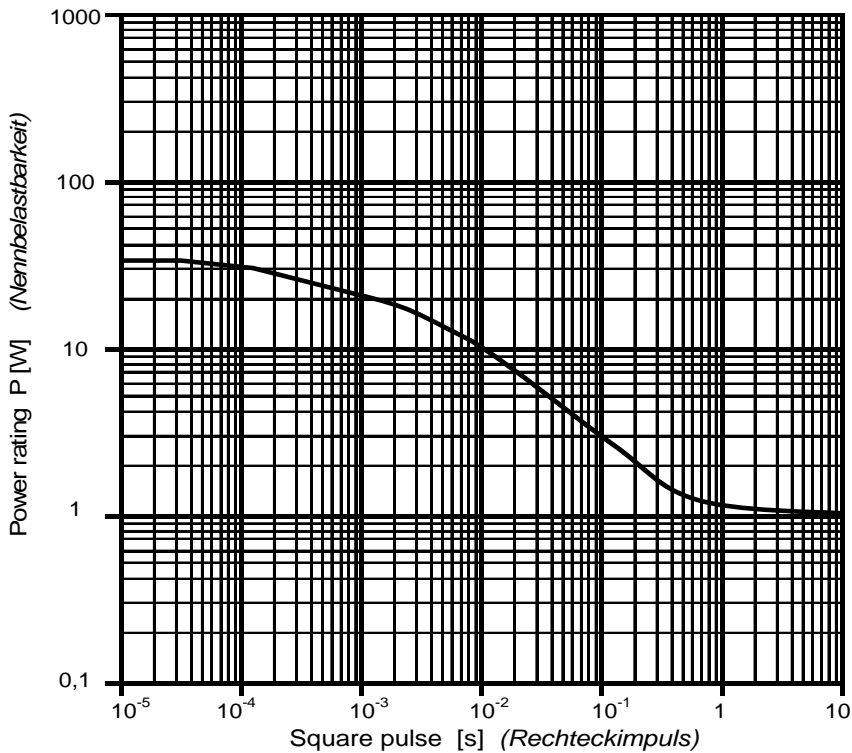
Single pulse 1,2 / 50µs (Einzelimpuls)



Pulse rating $\bar{P} \leq P_{70}$ (Impulsbelastbarkeit)

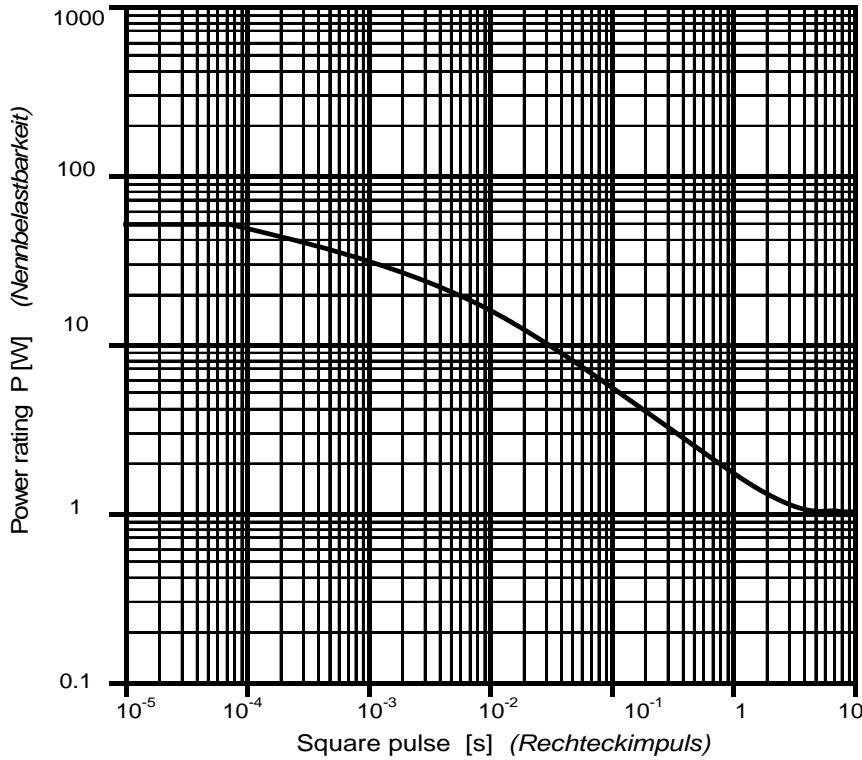
$\vartheta_u \leq 70^\circ\text{C}$ \hat{U}_{max} . see diagram next page

$\vartheta_u \leq 70^\circ\text{C}$ \hat{U}_{max} . Siehe Diagramm nächste Seite



**SMD-Metal Film Resistors
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Single pulse \bar{P} 0, $\vartheta_u \leq 70^\circ\text{C}$, \hat{U}_{max} . See Diagram below
Einzelimpuls $\bar{P} \rightarrow$ 0, $\vartheta_u \leq 70^\circ\text{C}$, \hat{U}_{max} . Siehe Diagramm darunter



max. pulse voltage \bar{P} see Diagrams $\vartheta_u \leq 70^\circ\text{C}$
max. Impulsspannung \bar{P} siehe Diagramme $\vartheta_u \leq 70^\circ\text{C}$

