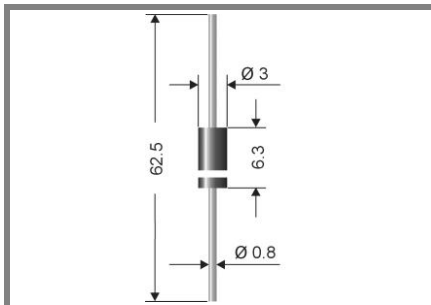


BZW 06-5V8 ... BZW 06-376B



Axial lead diode

Unidirectional and bidirectional Transient Voltage Suppressor diodes

BZW 06-5V8...BZW 06-376B

Pulse Power Dissipation: 600 W

Stand-off voltage: 5,8...376 V

Features

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0
- For bidirectional types (suffix "B"), electrical characteristics apply in both directions.
- The standard tolerance of the breakdown voltage for each type is $\pm 5\%$.

Mechanical Data

- Plastic case DO-15 / DO-204AC
- Weight approx.: 0,4 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 4000 pieces per ammo

- 1) Non-repetitive current pulse see curve $I_{PPM} = f(tr)$
- 2) Valid, if leads are kept at ambient temperature at a distance of 10 mm from case
- 3) Unidirectional diodes only

Absolute Maximum Ratings		$T_A = 25\text{ }^\circ\text{C}$, unless otherwise specified	
Symbol	Conditions	Values	Units
P_{PPM}	Peak pulse power dissipation (10 / 1000 μs waveform) ¹⁾ $T_a = 25\text{ }^\circ\text{C}$	600	W
$P_{M(AV)}$	Steady state power dissipation ²⁾ , $T_a = 25\text{ }^\circ\text{C}$	5	W
I_{FSM}	Peak forward surge current, 60 Hz half sine-wave ³⁾ $T_a = 25\text{ }^\circ\text{C}$	100	A
R_{thA}	Max. thermal resistance junction to ambient ²⁾	45	K/W
R_{thT}	Max. thermal resistance junction to terminal	15	K/W
T_j	Operating junction temperature	- 50 ... + 175	$^\circ\text{C}$
T_s	Storage temperature	- 50 ... + 175	$^\circ\text{C}$
V_f	Max. instant. forw. voltage $I_f = 50\text{ A}$ ³⁾	$V_{BR} \leq 200\text{V}, V_F < 3,0$	V
		$V_{BR} > 200\text{V}, V_F < 6.5$	V

Type	Characteristics						
	Stand-off voltage@ I_D		Breakdown voltage@ I_T		Test current I_T mA	Max. clamping voltage@ I_{PPM}	
	V_{WM} V	I_D μA	min. V	max. V		V_C V	I_{PPM} A
BZW 06-5V8	5,8	1000	6,45	7,14	10	10,5	57
BZW 06-6V4	6,4	500	7,13	7,88	10	11,3	53
BZW 06-7V0	7,02	200	7,79	8,61	10	12,1	50
BZW 06-7V8	7,78	50	8,65	9,55	1	13,4	45
BZW 06-8V5	8,55	10	9,5	10,5	1	14,5	41
BZW 06-9V4	9,4	5	10,5	11,6	1	15,6	38
BZW 06-10	10,2	5	11,4	12,6	1	16,7	36
BZW 06-11	11,1	5	12,4	13,7	1	18,2	33
BZW 06-13	12,8	5	14,3	15,8	1	21,2	28
BZW 06-14	13,6	5	15,2	16,8	1	22,5	27
BZW 06-15	15,3	5	17,1	18,9	1	25,2	24
BZW 06-17	17,1	5	19	21	1	27,7	22
BZW 06-19	18,8	5	20,9	23,1	1	30,6	20
BZW 06-20	20,5	5	22,8	25,2	1	33,2	18
BZW 06-23	23,1	5	25,7	28,4	1	37,5	16
BWZ 06-26	25,6	5	28,5	31,5	1	41,5	14,5
BZW 06-28	28,2	5	31,4	34,7	1	45,7	13,1
BZW 06-31	30,8	5	34,2	37,8	1	49,9	12
BZW 06-33	33,3	5	37,1	41	1	53,9	11,1
BZW 06-37	36,8	5	40,9	45,2	1	59,3	10,1
BZW 06-40	40,2	5	44,7	49,4	1	64,8	9,3
BZW 06-44	43,6	5	48,5	53,6	1	70,1	8,6
BZW 06-48	47,8	5	53,2	58,8	1	77	7,8
BZW 06-53	53	5	58,9	65,1	1	85	7,1
BZW 06-58	58,1	5	64,6	71,4	1	92	6,5
BZW 06-64	64,1	5	71,3	78,8	1	103	5,8
BZW 06-70	70,1	5	77,9	86,1	1	113	5,3
BZW 06-78	77,8	5	86,5	95,5	1	125	4,8
BZW 06-85	85,8	5	95	105	1	137	4,4
BZW 06-94	94	5	105	116	1	152	3,9
BZW 06-102	102	5	114	126	1	165	3,6
BZW 06-111	111	5	124	137	1	179	3,4
BZW 06-128	128	5	143	158	1	207	2,9
BZW 06-136	136	5	152	168	1	219	2,7
BZW 06-145	145	5	162	179	1	234	2,6
BZW 06-154	154	5	171	189	1	246	2,4
BZW 06-171	171	5	190	210	1	274	2,2
BZW 06-188	188	5	209	231	1	301	2
BZW 06-213	213	5	237	263	1	344	1,8

BZW 06-5V8 ... BZW 06-376B

Type	Characteristics						
	Stand-off voltage@I _D		Breakdown voltage@I _T		Test current I _T mA	Max. clamping voltage@I _{PPM}	
	V _{WM} V	I _D μA	min. V	max. V		V _C V	I _{PPM} A
BZW 06-239	239	5	266	294	1	384	1,7
BZW 06-256	256	5	285	315	1	414	1,6
BZW 06-273	273	5	304	336	1	438	1,6
BZW 06-299	299	5	332	368	1	482	1,6
BZW 06-342	342	5	380	420	1	548	1,3
BZW 06-376	376	5	418	462	1	603	1,3

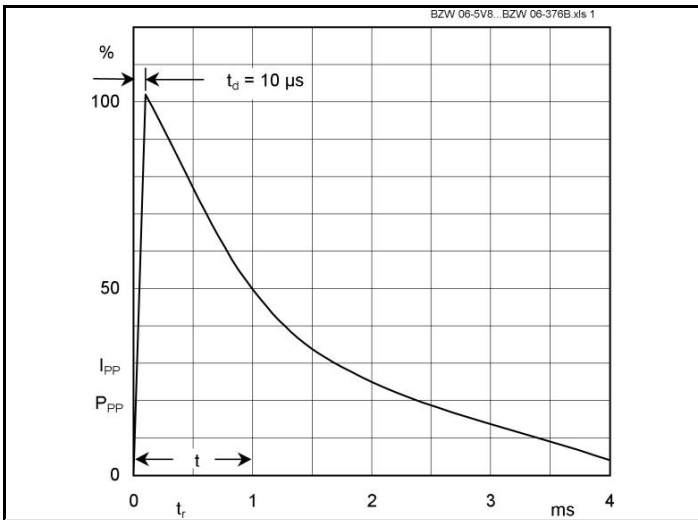
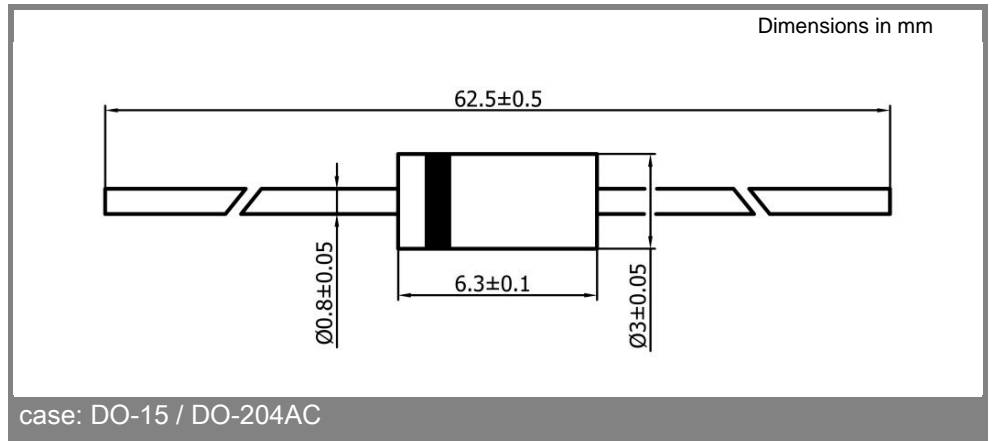


Fig. 1 10/1000 μs - pulse waveform

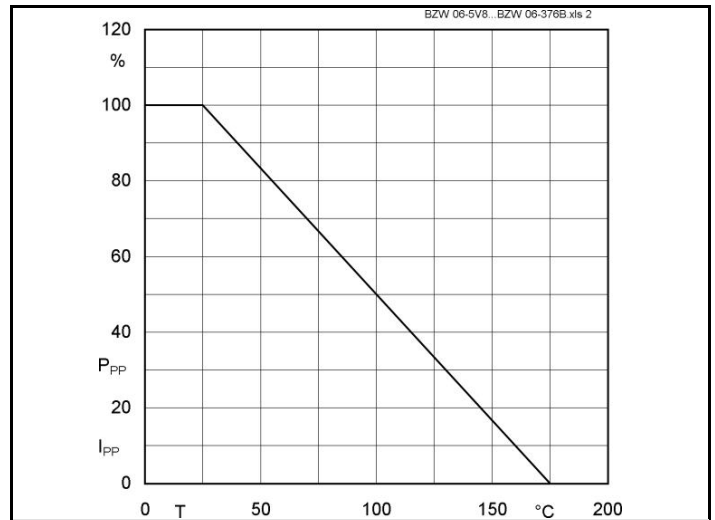


Fig. 2 Peak pulse power or current vs. case temperature ²⁾

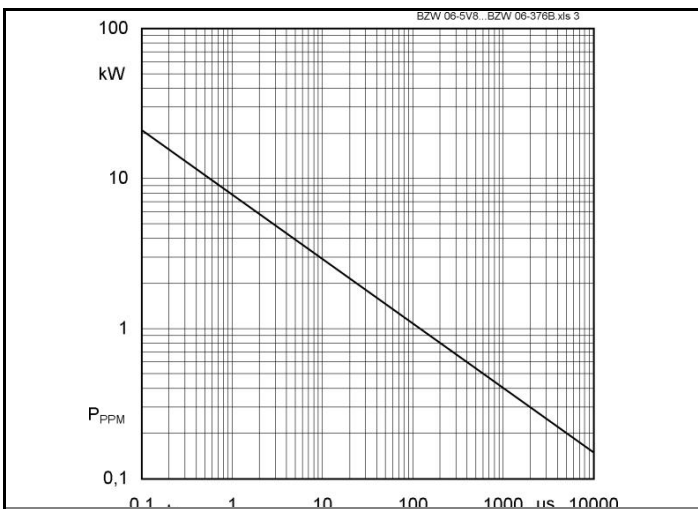


Fig. 3 Peak pulse power versus pulse duration