

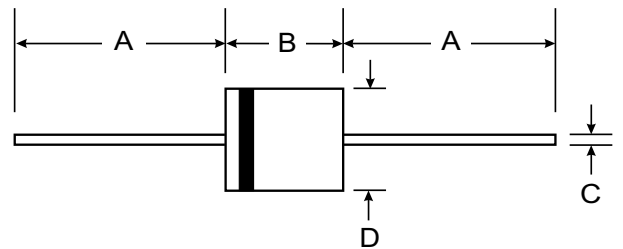
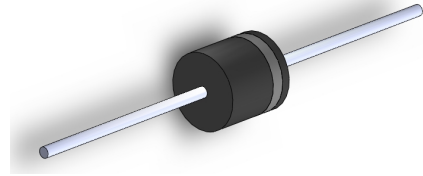
VOLTAGE RANGE: 5.0 - 190 V
POWER: 5000Watts

Features

- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O

Mechanical Data

- Case: JEDEC R-6 Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Weight: 2.10 grams (approx.)



R-6		
Dim	Min	Max
A	25.4	—
B	8.6	9.1
C	1.2	1.3
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation at $T_A = 25^\circ\text{C}$ (Note 1, 2, 5) Figure 3	PPPM	5000 Minimum	W
Peak Forward Surge Current (Note 3)	IFSM	400	A
Peak Pulse Current on 10/1000 μS Waveform (Note 1) Figure 1	IPPM	See Table 1	A
Steady State Power Dissipation (Note 2, 4)	$P_{M(AV)}$	8.0	W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +175	$^\circ\text{C}$

- Note: 1. Non-repetitive current pulse, per Figure 1 and derated above $T_A = 25^\circ\text{C}$ per Figure 4.
 2. Mounted on 20mm² copper pad.
 3. 8.3ms single half sine-wave duty cycle = 4 pulses per minutes maximum,
 4. Lead temperature at $75^\circ\text{C} = T_L$.
 5. Peak pulse power waveform is 10/1000 μS .



TYPE		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I _T	Breakdown Voltage Max. @ I _T	Test Current	Maximum Clamping Voltage @I _{PP}	Peak Pulse Current	Reverse Leakage @V _{RWM}
(Uni)	(BI)	V _{RWM} (V)	V _{BR} MIN(V)	V _{BR} MAX(V)	I _T (mA)	V _C (V)	I _{PP} (A)	I _R (uA)
BZW50-5.0	BZW50-5.0B	5.0	6.40	7.25	10	9.2	543.5	1000.0
BZW50-6.0	BZW50-6.0B	6.0	6.67	7.67	10	10.3	485.4	1000.0
BZW50-6.5	BZW50-6.5B	6.5	7.22	8.30	10	11.2	446.4	500.0
BZW50-7.0	BZW50-7.0B	7.0	7.78	8.95	10	12.0	416.7	200.0
BZW50-7.5	BZW50-7.5B	7.5	8.33	9.58	1.0	12.9	387.6	50.0
BZW50-8.0	BZW50-8.0B	8.0	8.89	10.23	1.0	13.6	367.6	10.0
BZW50-8.5	BZW50-8.5B	8.5	9.44	10.82	1.0	14.4	347.2	5.0
BZW50-9.0	BZW50-9.0B	9.0	10.0	11.5	1.0	15.4	324.7	5.0
BZW50-10	BZW50-10B	10	11.1	12.8	1.0	17.0	294.1	5.0
BZW50-11	BZW50-11B	11	12.2	14.0	1.0	18.2	274.7	5.0
BZW50-12	BZW50-12B	12	13.3	15.3	1.0	19.9	251.3	5.0
BZW50-13	BZW50-13B	13	14.4	16.5	1.0	21.5	232.6	5.0
BZW50-14	BZW50-14B	14	15.6	17.9	1.0	23.2	215.5	5.0
BZW50-15	BZW50-15B	15	16.7	19.2	1.0	24.4	204.9	5.0
BZW50-16	BZW50-16B	16	17.8	20.5	1.0	26.0	192.3	5.0
BZW50-17	BZW50-17B	17	18.9	21.7	1.0	27.6	181.2	5.0
BZW50-18	BZW50-18B	18	20.0	23.3	1.0	29.2	171.2	5.0
BZW50-20	BZW50-20B	20	22.2	25.5	1.0	32.4	154.3	5.0
BZW50-22	BZW50-22B	22	24.4	28.0	1.0	35.5	140.8	5.0
BZW50-24	BZW50-24B	24	26.7	30.7	1.0	38.9	128.5	5.0
BZW50-26	BZW50-26B	26	28.9	33.2	1.0	42.1	118.8	5.0
BZW50-28	BZW50-28B	28	31.1	35.8	1.0	45.4	110.1	5.0
BZW50-30	BZW50-30B	30	33.3	38.3	1.0	48.4	103.3	5.0
BZW50-33	BZW50-33B	33	36.7	42.2	1.0	53.3	93.8	5.0
BZW50-36	BZW50-36B	36	40.0	46.0	1.0	58.1	86.1	5.0
BZW50-40	BZW50-40B	40	44.4	51.1	1.0	64.5	77.5	5.0
BZW50-43	BZW50-43B	43	47.8	54.9	1.0	69.4	72.0	5.0
BZW50-45	BZW50-45B	45	50.0	57.5	1.0	72.7	68.8	5.0
BZW50-48	BZW50-48B	48	53.3	61.3	1.0	77.4	64.6	5.0
BZW50-51	BZW50-51B	51	56.7	65.2	1.0	82.4	60.7	5.0
BZW50-54	BZW50-54B	54	60.0	69.0	1.0	87.1	57.4	5.0
BZW50-58	BZW50-58B	58	64.4	74.1	1.0	93.6	53.4	5.0
BZW50-60	BZW50-60B	60	66.7	76.7	1.0	96.8	51.7	5.0
BZW50-64	BZW50-64B	64	71.1	81.8	1.0	103	48.5	5.0
BZW50-70	BZW50-70B	70	77.8	89.5	1.0	113	44.2	5.0
BZW50-75	BZW50-75B	75	83.0	95.8	1.0	121	41.3	5.0
BZW50-78	BZW50-78B	78	86.0	99.7	1.0	126	39.7	5.0
BZW50-85	BZW50-85B	85	94.0	108.2	1.0	137	36.5	5.0
BZW50-90	BZW50-90B	90	100	115.5	1.0	146	34.2	5.0
BZW50-100	BZW50-100B	100	111	128.0	1.0	162	30.9	5.0
BZW50-110	BZW50-110B	110	122	140.5	1.0	177	28.2	5.0
BZW50-120	BZW50-120B	120	133	153.0	1.0	193	25.9	5.0
BZW50-130	BZW50-130B	130	144	165.5	1.0	209	23.9	5.0
BZW50-150	BZW50-150B	150	167	192.5	1.0	243	20.6	5.0
BZW50-160	BZW50-160B	160	178	205.0	1.0	259	19.3	5.0
BZW50-170	BZW50-170B	170	189	217.5	1.0	275	18.2	5.0
BZW50-180	BZW50-180B	180	200	230.4	1.0	290	17.2	5.0
BZW50-190	BZW50-190B	190	211	243.2	1.0	306	16.3	5.0

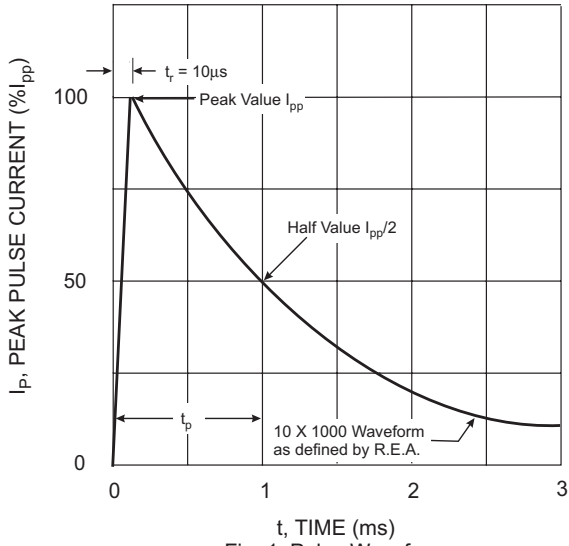


Fig. 1 Pulse Waveform

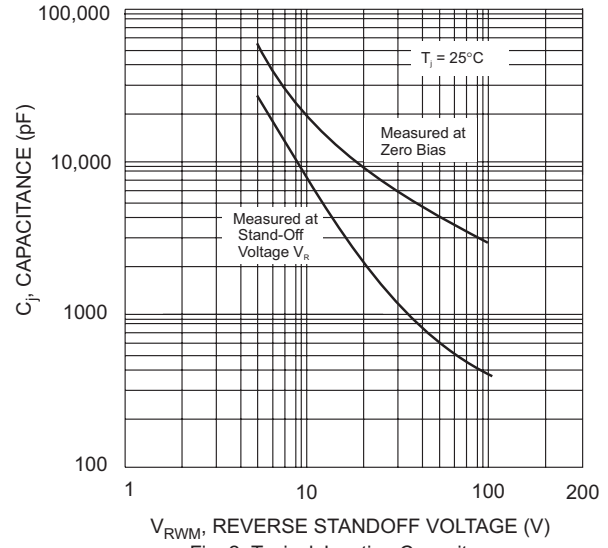


Fig. 2 Typical Junction Capacitance

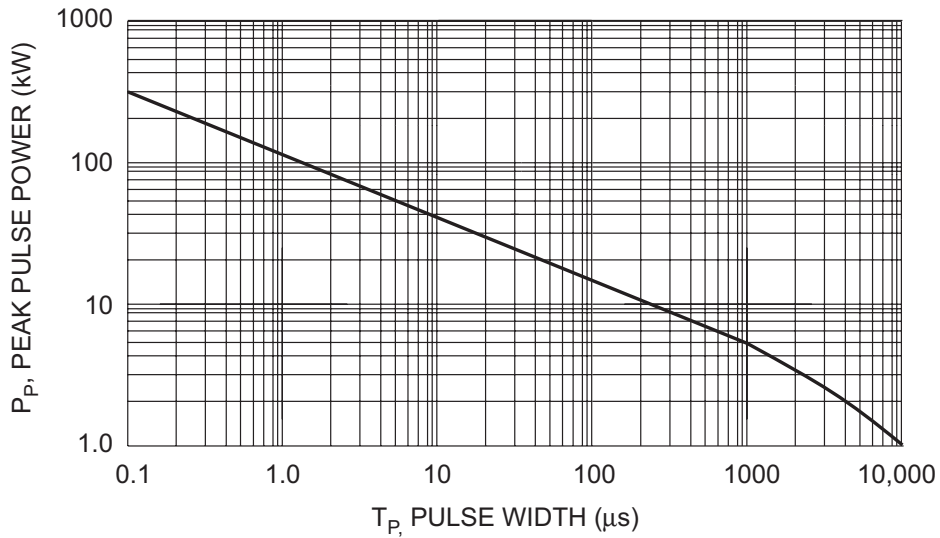


Fig. 3 Pulse Derating Curve

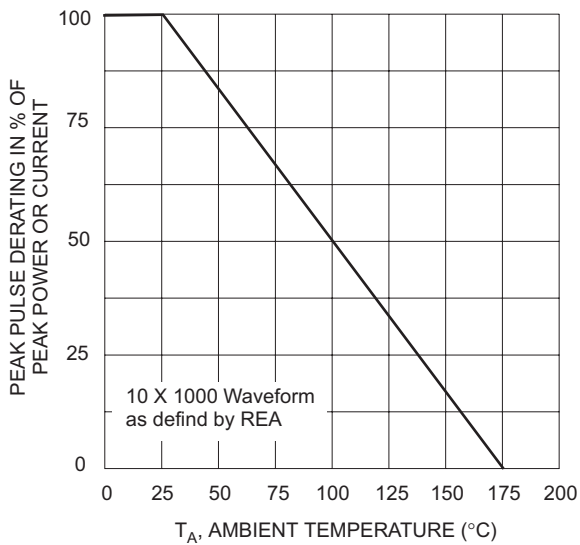


Fig. 4 Pulse Derating Curve

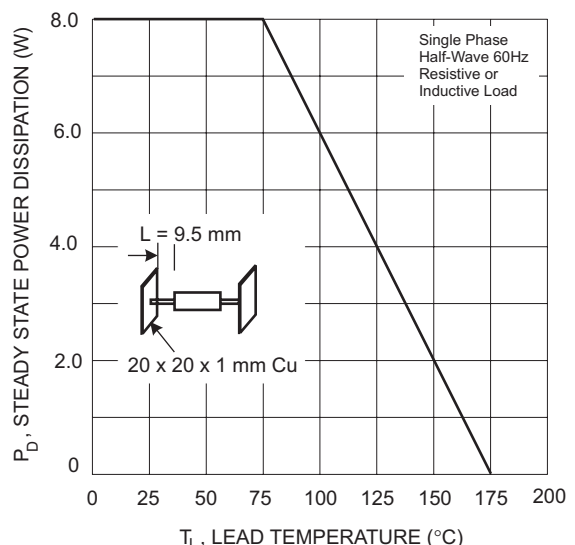


Fig. 5 Steady State Power Derating