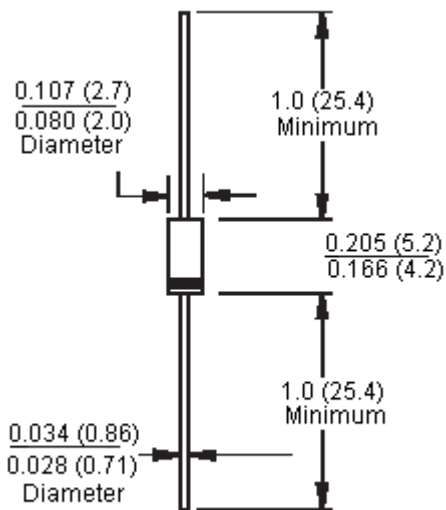


Features:

- Plastic package.
- Exceeds environmental standards of MIL-STD-19500.
- 400W surge capability at 10 x 1000 μ s waveform, duty cycle: 0.01%.
- Excellent clamping capability.
- Low impedancesurge resistance.
- Very fast response timeV.
- Typical I_R less than 1 μ A above 10V.
- High temperature soldering guaranteed: 260°C/10 seconds/0.375 inch (9.5mm) lead length/5lbs. (2.3kg) tension.

DO-41



Dimensions : Inches (Millimetres)

Mechanical Data

Case : Molded plastic.
Lead : Axial leads, solderable per MIL-STD-202, Method 208.
Polarity : Color band denotes cathode except bipolar.
Weight : 0.34 gram.

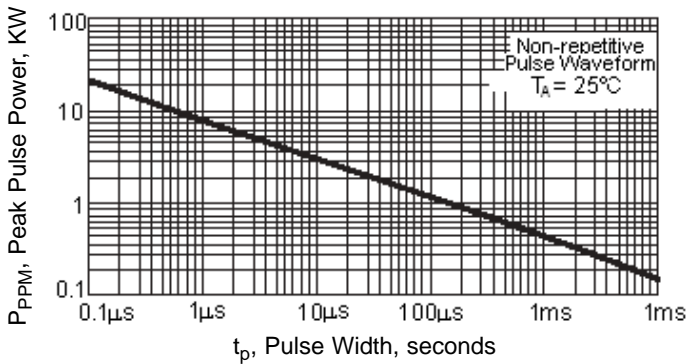
Maximum Ratings and Electrical Characteristics ($T_A = 25^\circ\text{C}$)

Type Number	Symbol	Value	Units
Peak Pulse Power Dissipation at $T_A = 25^\circ\text{C}$, $T_p = 1\text{ms}$ (Note 1)	P_{PP}	Minimum 400	Watts
Steady State Power Dissipation at $T_L = 75^\circ\text{C}$ Lead Lengths 0.375 Inch 9.5mm (Note 2)	P_D	1.0	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) (Note 3)	I_{FSM}	40	Amps
Junction to Leads	$R_{\theta JL}$	60	$^\circ\text{C/W}$
Junction to Ambient on Printed Circuit. L Lead = 10mm	$R_{\theta JA}$	100	
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 175	$^\circ\text{C}$

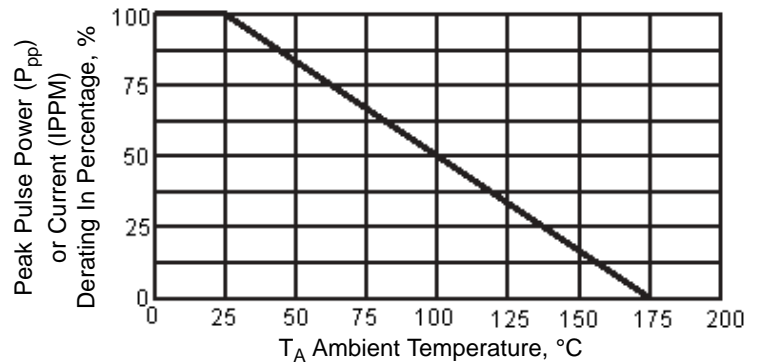
- Notes: 1. Non-repetitive current pulse, per derated above $T_A = 25^\circ\text{C}$.
 2. Mounted on copper pad area of 1.6 x 1.6 inch (40 x 40mm).
 3. Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

Ratings and Characteristic Curves

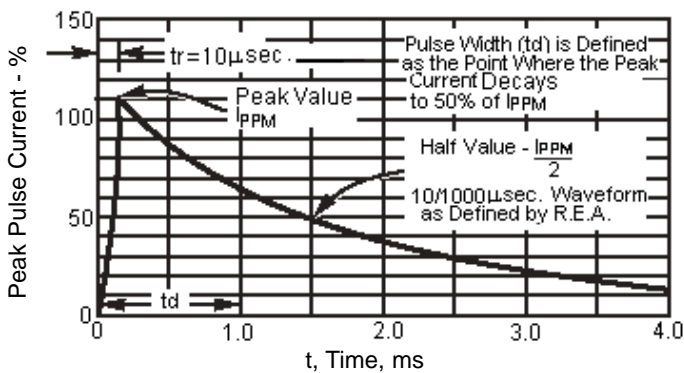
Peak Pulse Power Rating Curve



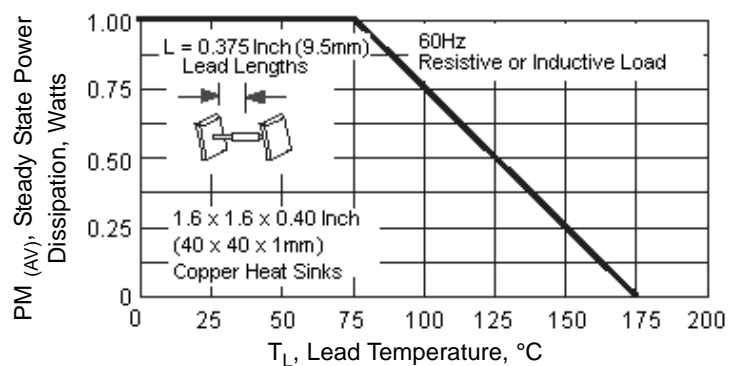
Pulse Derating Curve



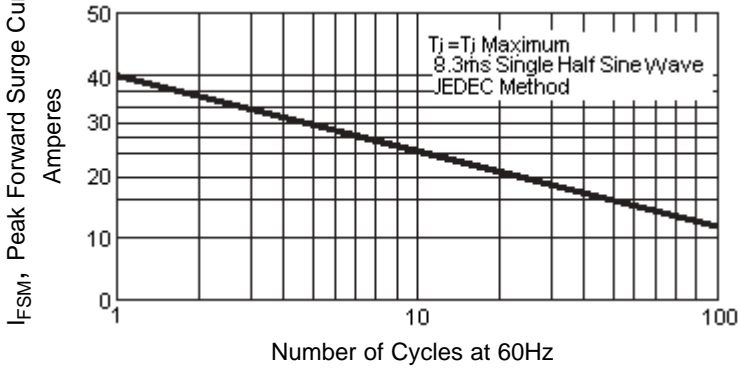
Clamping Power Pulse Waveform



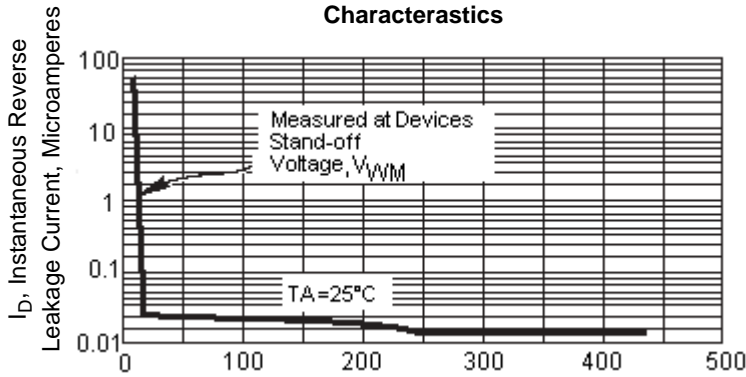
Steady State Power Derating Curve



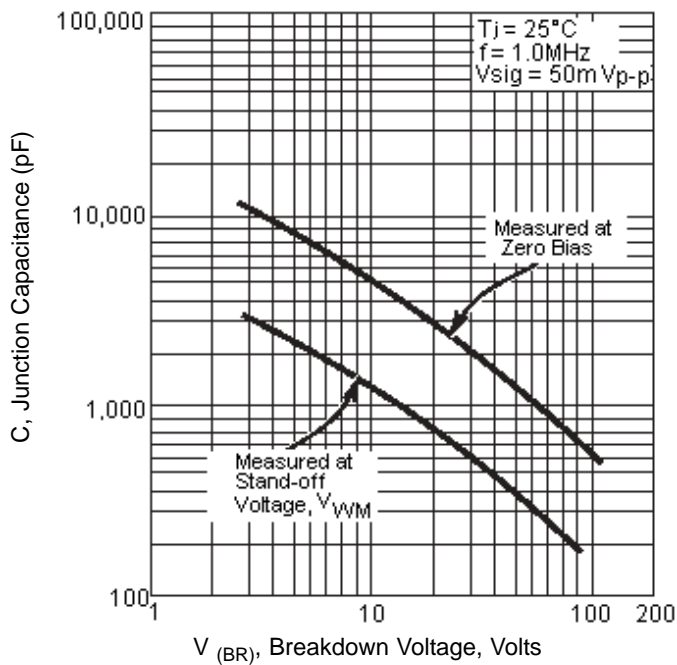
Maximum Non-Repetitive Forward Surge Current Unidirectional Only



Typical Reverse Leakage Characteristics



Typical Junction Capacitance Unidirectional



Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Device		Breakdown Voltage V_{BR} at I_R (V) ⁽¹⁾		Test Current I_T (mA)	Stand-off Voltage V_{WM} (Volts)	Maximum Reverse Leakage at V_{WM} I_o (μA) ⁽³⁾	Maximum Peak Pulse Current I_{PPM} (Amps)	Maximum Clamping Voltage at I_{PPM} V_c (Volts)	Maximum Temperature Coefficient of $V_{(BR)}$ ($\%/^\circ\text{C}$)
		Unidirectional	Bidirectional						
BZW04-11	BZW04-11B	12.4	13.7	1.0	11.1	5.0	22.0	18.2	0.081
BZW04-128	BZW04-128B	143.0	158.0		128.0	1.0	2.0	207.0	0.108
BZW04-13	BZW04-13B	14.3	15.8		12.8	5.0	19.0	21.2	0.084
BZW04-14	BZW04-14B	15.2	16.8		13.6	1.0	17.8	22.5	0.083
BZW04-145	BZW04-145B	161.0	179.0		145		1.7	234.0	0.108
BZW04-15	BZW04-15B	17.1	18.9		15.3		16.0	25.2	0.088
BZW04-154	BZW04-154B	171.0	189.0		154.0		1.6	246.0	0.108
BZW04-17	BZW04-17B	19.0	21.0		17.1		14.5	27.7	0.090
BZW04-171	BZW04-171B	190.0	210.0		171.0		1.5	274.0	0.108
BZW04-19	BZW04-19B	20.9	23.1		18.8		13.0	30.6	0.092
BZW04-20	BZW04-20B	22.8	25.2		20.5		12.0	33.2	0.094
BZW04-23	BZW04-23B	25.7	28.4		23.1		10.7	37.5	0.096
BZW04-26	BZW04-26B	28.5	31.5		25.6		9.6	41.5	0.097
BZW04-28	BZW04-28B	31.4	34.7		28.2		8.8	45.7	0.098
BZW04-31	BZW04-31B	34.2	37.8		30.8		8.0	49.9	0.099
BZW04-342	BZW04-342B	380.0	420.0		342.0		0.75	548.0	0.110
BZW04-376	BZW04-376B	418.0	462.0		376.0		0.67	603.0	
BZW04-40	BZW04-40B	44.7	49.4		40.2		6.2	64.8	0.101
BZW04-44	BZW04-44B	48.5	53.6		43.6		5.7	70.1	0.102
BZW04-48	BZW04-48B	53.2	58.8		47.8		5.2	77.0	0.103
BZW04-64	BZW04-64B	71.3	78.8	64.1	3.9		103.0	0.105	
BZW04-85	BZW04-85B	95.0	105.0	85.5	2.9		137.0	0.106	

- Notes:
1. Pulse test: $t_p < 50\text{ms}$.
 2. All terms and symbols are consistent with ANSI/IEEE C62.35.
 3. For bidirectional types having V_{WM} of 10 volts and less, the I_D limit is doubled.

Notes:

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