



ELECTRICAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)								
PART NUMBER	BREAKDOWN VOLTAGE V_{BR} AT I_T ⁽¹⁾ (V)		TEST CURRENT I_T (mA)	STAND-OFF VOLTAGE V_{WM} (V)	MAXIMUM REVERSE LEAKAGE AT V_{WM} I_D ⁽⁴⁾ (μA)	MAXIMUM PEAK PULSE CURRENT I_{PPM} ⁽²⁾ (A)	MAXIMUM CLAMPING VOLTAGE AT I_{PPM} V_C (V)	MAXIMUM TEMPERATURE COEFFICIENT OF V_{BR} (%/ $^\circ\text{C}$)
	MIN.	MAX.						
UNI-DIRECTIONAL TYPES								
BZW04-5V8	6.45	7.14	10.0	5.80	1000	38.0	10.5	0.057
BZW04-6V4	7.13	7.88	10.0	6.40	500	35.4	11.3	0.061
BZW04-7V0	7.79	8.61	10.0	7.02	200	33.0	12.1	0.065
BZW04-7V8	8.65	9.55	1.0	7.78	50	30.0	13.4	0.073
BZW04-8V5	9.50	10.5	1.0	8.55	10	27.6	14.5	0.075
BZW04-9V4	10.5	11.6	1.0	9.4	5.0	25.7	15.6	0.075
BZW04-10	11.4	12.6	1.0	10.2	1.0	24.0	16.7	0.078
BZW04-11	12.4	13.7	1.0	11.1	1.0	22.0	18.2	0.081
BZW04-13	14.3	15.8	1.0	12.8	1.0	19.0	21.2	0.084
BZW04-14	15.2	16.8	1.0	13.6	1.0	17.8	22.5	0.086
BZW04-15	17.1	18.9	1.0	15.3	1.0	16.0	25.2	0.088
BZW04-17	19.0	21.0	1.0	17.1	1.0	14.5	27.7	0.090
BZW04-19	20.9	23.1	1.0	18.8	1.0	13.0	30.6	0.092
BZW04-20	22.8	25.2	1.0	20.5	1.0	12.0	33.2	0.094
BZW04-23	25.7	28.4	1.0	23.1	1.0	10.7	37.5	0.096
BZW04-26	28.5	31.5	1.0	25.6	1.0	9.6	41.5	0.097
BZW04-28	31.4	34.7	1.0	28.2	1.0	8.8	45.7	0.098
BZW04-31	34.2	37.8	1.0	30.8	1.0	8.0	49.9	0.099
BZW04-33	37.1	41.0	1.0	33.3	1.0	7.4	53.9	0.100
BZW04-37	40.9	45.2	1.0	36.8	1.0	6.7	59.3	0.101
BZW04-40	44.7	49.4	1.0	40.2	1.0	6.2	64.8	0.101
BZW04-44	48.5	53.6	1.0	43.6	1.0	5.7	70.1	0.102
BZW04-48	53.2	58.8	1.0	47.8	1.0	5.2	77.0	0.103
BZW04-53	58.9	65.1	1.0	53.0	1.0	4.7	85.0	0.104
BZW04-58	64.6	71.4	1.0	58.1	1.0	4.3	92.0	0.104
BZW04-64	71.3	78.8	1.0	64.1	1.0	3.9	103	0.105
BZW04-70	77.9	86.1	1.0	70.1	1.0	3.5	113	0.105
BZW04-78	86.5	95.5	1.0	78.0	1.0	3.2	125	0.105
BZW04-85	95.0	105	1.0	85.5	1.0	2.9	137	0.106
BZW04-94	105	116	1.0	94.0	1.0	2.6	152	0.107
BZW04-102	114	126	1.0	102	1.0	2.4	165	0.107
BZW04-110	124	137	1.0	111	1.0	2.2	179	0.107
BZW04-128	143	158	1.0	128	1.0	2.0	207	0.108
BZW04-136	152	168	1.0	136	1.0	1.8	219	0.108
BZW04-145	161	179	1.0	145	1.0	1.7	234	0.108
BZW04-154	171	189	1.0	154	1.0	1.6	246	0.108
BZW04-171	190	210	1.0	171	1.0	1.5	274	0.108
BZW04-188	209	231	1.0	188	1.0	1.4	301	0.108
BZW04-213	237	263	1.0	213	1.0	1.2	344	0.110
BZW04-239	266	294	1.0	239	1.0	1.1	384	0.110
BZW04-256	285	315	1.0	256	1.0	1.0	414	0.110
BZW04-273	304	336	1.0	273	1.0	0.90	438	0.110
BZW04-299	332	368	1.0	299	1.0	0.80	482	0.110
BZW04-342	380	420	1.0	342	1.0	0.75	548	0.110
BZW04-376	418	462	1.0	376	1.0	0.67	603	0.110



ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)								
PART NUMBER	BREAKDOWN VOLTAGE V _{BR} AT I _T (1) (V)		TEST CURRENT I _T (mA)	STAND-OFF VOLTAGE V _{WM} (V)	MAXIMUM REVERSE LEAKAGE AT V _{WM} I _D (4) (µA)	MAXIMUM PEAK PULSE CURRENT I _{PPM} (2) (A)	MAXIMUM CLAMPING VOLTAGE AT I _{PPM} V _C (V)	MAXIMUM TEMPERATURE COEFFICIENT OF V _{BR} (%/°C)
	MIN.	MAX.						
BI-DIRECTIONAL TYPES								
BZW04-5V8B	6.45	7.14	10.0	5.80	1000	38.0	10.5	0.057
BZW04-6V4B	7.13	7.88	10.0	6.40	500	35.4	11.3	0.061
BZW04-7V0B	7.79	8.61	10.0	7.02	200	33.0	12.1	0.065
BZW04-7V8B	8.65	9.55	1.0	7.78	50	30.0	13.4	0.073
BZW04-8V5B	9.50	10.5	1.0	8.55	10	27.6	14.5	0.075
BZW04-9V4B	10.5	11.6	1.0	9.4	5.0	25.7	15.6	0.075
BZW04-10B	11.4	12.6	1.0	10.2	1.0	24.0	16.7	0.078
BZW04-11B	12.4	13.7	1.0	11.1	1.0	22.0	18.2	0.081
BZW04-13B	14.3	15.8	1.0	12.8	1.0	19.0	21.2	0.084
BZW04-14B	15.2	16.8	1.0	13.6	1.0	17.8	22.5	0.086
BZW04-15B	17.1	18.9	1.0	15.3	1.0	16.0	25.2	0.088
BZW04-17B	19.0	21.0	1.0	17.1	1.0	14.5	27.7	0.090
BZW04-19B	20.9	23.1	1.0	18.8	1.0	13.0	30.6	0.092
BZW04-20B	22.8	25.2	1.0	20.5	1.0	12.0	33.2	0.094
BZW04-23B	25.7	28.4	1.0	23.1	1.0	10.7	37.5	0.096
BZW04-26B	28.5	31.5	1.0	25.6	1.0	9.6	41.5	0.097
BZW04-28B	31.4	34.7	1.0	28.2	1.0	8.8	45.7	0.098
BZW04-31B	34.2	37.8	1.0	30.8	1.0	8.0	49.9	0.099
BZW04-33B	37.1	41.0	1.0	33.3	1.0	7.4	53.9	0.100
BZW04-37B	40.9	45.2	1.0	36.8	1.0	6.7	59.3	0.101
BZW04-40B	44.7	49.4	1.0	40.2	1.0	6.2	64.8	0.101
BZW04-44B	48.5	53.6	1.0	43.6	1.0	5.7	70.1	0.102
BZW04-48B	53.2	58.8	1.0	47.8	1.0	5.2	77.0	0.103
BZW04-53B	58.9	65.1	1.0	53.0	1.0	4.7	85.0	0.104
BZW04-58B	64.6	71.4	1.0	58.1	1.0	4.3	92.0	0.104
BZW04-64B	71.3	78.8	1.0	64.1	1.0	3.9	103	0.105
BZW04-70B	77.9	86.1	1.0	70.1	1.0	3.5	113	0.105
BZW04-78B	86.5	95.5	1.0	78.0	1.0	3.2	125	0.105
BZW04-85B	95.0	105	1.0	85.5	1.0	2.9	137	0.106
BZW04-94B	105	116	1.0	94.0	1.0	2.6	152	0.107
BZW04-102B	114	126	1.0	102	1.0	2.4	165	0.107
BZW04-110B	124	137	1.0	111	1.0	2.2	179	0.107
BZW04-128B	143	158	1.0	128	1.0	2.0	207	0.108
BZW04-136B	152	168	1.0	136	1.0	1.8	219	0.108
BZW04-145B	161	179	1.0	145	1.0	1.7	234	0.108
BZW04-154B	171	189	1.0	154	1.0	1.6	246	0.108
BZW04-171B	190	210	1.0	171	1.0	1.5	274	0.108
BZW04-188B	209	231	1.0	188	1.0	1.4	301	0.108
BZW04-213B	237	263	1.0	213	1.0	1.2	344	0.110
BZW04-239B	266	294	1.0	239	1.0	1.1	384	0.110
BZW04-256B	285	315	1.0	256	1.0	1.0	414	0.110
BZW04-273B	304	336	1.0	273	1.0	0.90	438	0.110
BZW04-299B	332	368	1.0	299	1.0	0.80	482	0.110
BZW04-342B	380	420	1.0	342	1.0	0.75	548	0.110
BZW04-376B	418	462	1.0	376	1.0	0.67	603	0.110

Notes

- (1) Pulse test: t_p ≥ 50 ms
- (2) Surge current waveform per fig. 3 and derated per fig. 2
- (3) All terms and symbols are consistent with ANSI/IEEE C62.35
- (4) For bi-directional types having V_{WM} of 10 V and less, the I_D limit is doubled



ORDERING INFORMATION (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
BZW0410-E3/54	0.350	54	550	13" diameter paper tape and reel
BZW0410HE3/54 ⁽¹⁾	0.350	54	550	13" diameter paper tape and reel

Note

⁽¹⁾ AEC-Q101 qualified

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

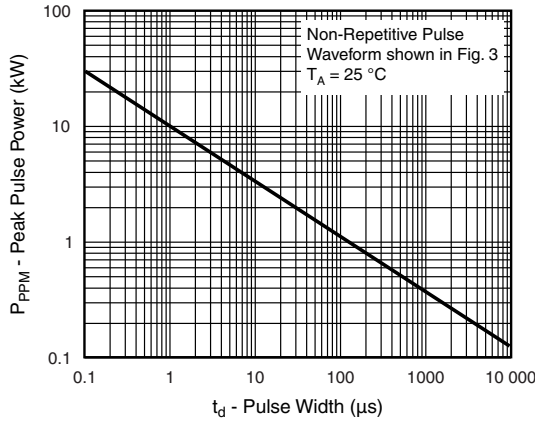


Fig. 1 - Peak Pulse Power Rating Curve

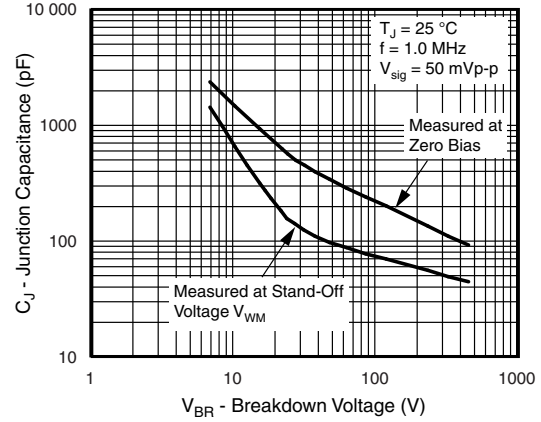


Fig. 4 - Typical Junction Capacitance

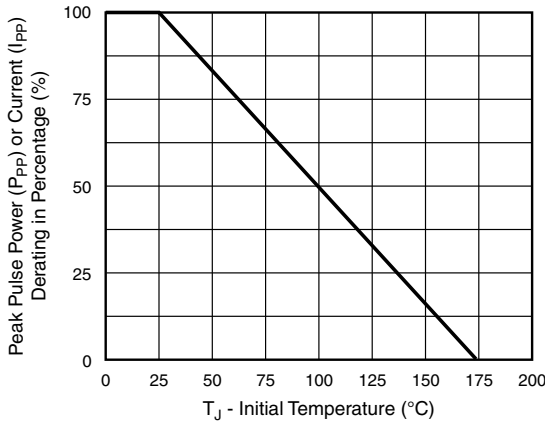


Fig. 2 - Pulse Power or Current vs. Initial Junction Temperature

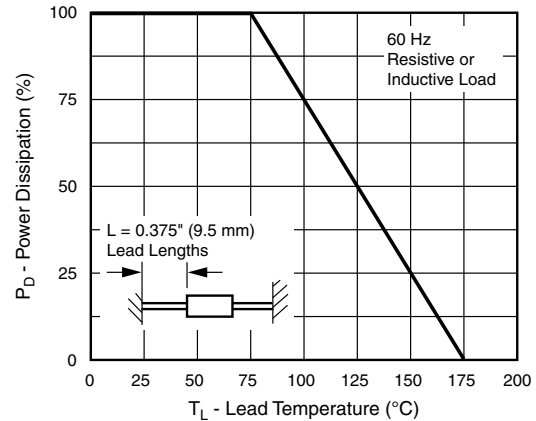


Fig. 5 - Power Derating Curve

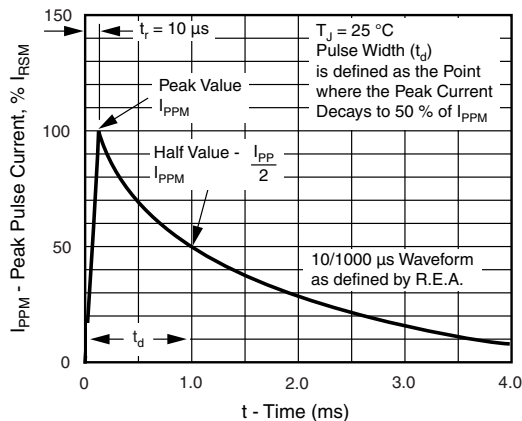


Fig. 3 - Pulse Waveform

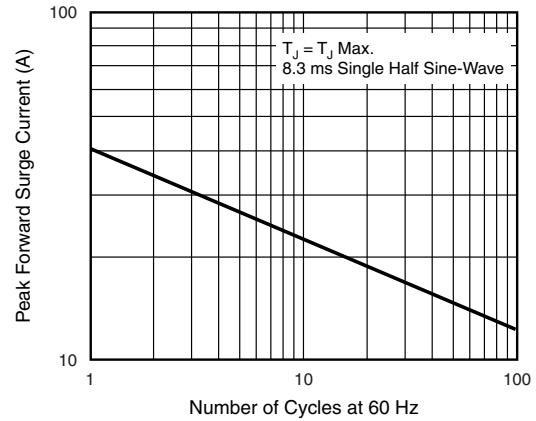
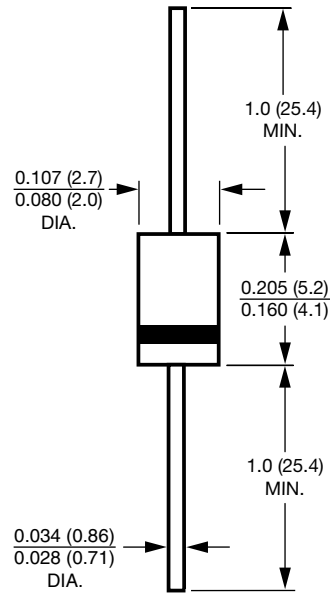


Fig. 6 - Max. Non-Repetitive Forward Surge Current Uni-Directional Only



PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

DO-41 (DO-204AL)





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