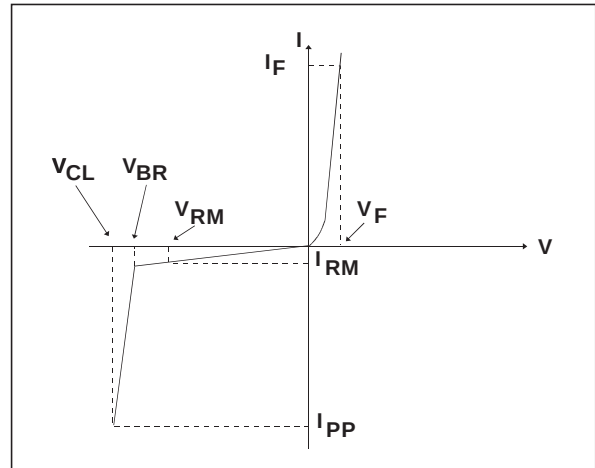


ELECTRICAL CHARACTERISTICS ($T_{amb} = 25^{\circ}\text{C}$)

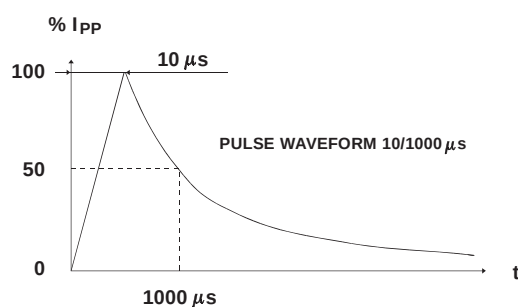
Symbol	Parameter
V_{RM}	Stand-off voltage
V_{BR}	Breakdown voltage
V_{CL}	Clamping voltage
I_{RM}	Leakage current @ V_{RM}
I_{PP}	Peak pulse current
αT	Voltage temperature coefficient
V_F	Forward voltage drop



Types		I_{RM} @ V_{RM}		V_{BR} @ I_R		V_{CL} @ I_{PP}		V_{CL} @ I_{PP}		αT	C
		max		min		max		max		max	typ
				note2		10/1000 μs		8/20 μs		note3	note4
Unidirectional	Bidirectional	μA	V	V	mA	V	A	V	A	$10^{-4}/^{\circ}\text{C}$	pF
BZW06-5V8	BZW06-5V8B	1000	5.8	6.45	10	10.5	57.0	13.4	298	5.7	4000
BZW06-6V4	BZW06-6V4B	500	6.4	7.13	10	11.3	53.0	14.5	276	6.1	3700
BZW06-8V5	BZW06-8V5B	10	8.5	9.5	1	14.5	41	18.6	215	7.3	2800
BZW06-10	BZW06-10B	5	10.2	11.4	1	16.7	36.0	21.7	184	7.8	2300
BZW06-13	BZW06-13B	5	12.8	14.3	1	21.2	28.0	27.2	147	8.4	1900
BZW06-15	BZW06-15B	1	15.3	17.1	1	25.2	24.0	32.5	123	8.8	1600
BZW06-19	BZW06-19B	1	18.8	20.9	1	30.6	19.6	39.3	102	9.2	1350
BZW06-20	BZW06-20B	1	20.5	22.8	1	33.2	18.0	42.8	93	9.4	1250
BZW06-23	BZW06-23B	1	23.1	25.7	1	37.5	16.0	48.3	83	9.6	1150
BZW06-26	BZW06-26B	1	25.6	28.5	1	41.5	14.5	53.5	75	9.7	1075
BZW06-28	BZW06-28B	1	28.2	31.4	1	45.7	13.1	59.0	68	9.8	1000
BZW06-31	BZW06-31B	1	30.8	34.2	1	49.9	12.0	64.3	62	9.6	950
BZW06-33	BZW06-33B	1	33.3	37.1	1	53.9	11.1	69.7	57	10.0	900
BZW06-40	BZW06-40B	1	40.2	44.7	1	64.8	9.3	84	48	10.1	800
BZW06-48	BZW06-48B	1	47.8	53.2	1	77.0	7.8	100	40	10.3	700
BZW06-58	BZW06-58B	1	58.1	64.6	1	92.0	6.5	121	33	10.4	625
BZW06-70	BZW06-70B	1	70.1	77.9	1	113	5.3	146	27.0	10.5	550
BZW06-85	BZW06-85B	1	85.5	95.0	1	137	4.4	178	22.5	10.6	500
BZW06-102	BZW06-102B	1	102	114	1	165	3.6	212	19.0	10.7	450
BZW06-128	BZW06-128B	1	128	143	1	207	2.9	265	15.0	10.8	400
BZW06-154	BZW06-154B	1	154	171	1	246	2.4	317	12.6	10.8	360
BZW06-171	BZW06-171B	1	171	190	1	274	2.2	353	11.3	10.8	350

Types		I_{RM} @ V_{RM}		V_{BR} @ I_R		V_{CL} @ I_{PP}		V_{CL} @ I_{PP}		αT	C
				min		max		max		max	typ
				note2		10/1000 μs		8/20 μs		note3	note4
Unidirectional	Bidirectional	μA	V	V	mA	V	A	V	A	$10^{-4}/^{\circ}C$	pF
BZW06-188	BZW06-188B	1	188	209	1	328	2.0	388	10.3	10.8	330
BZW06-213	BZW06-213B	1	231	237	1	344	2.0	442	9.0	11.0	310
BZW06-256	BZW06-256B	1	256	285	1	414	1.6	529	7.6	11.0	290
BZW06-273	BZW06-273B	1	273	304	1	438	1.6	564	7.1	11.0	280
BZW06-299	BZW06-299B	1	299	332	1	482	1.6	618	6.5	11.0	270
BZW06-342	BZW06-342B	1	342	380	1	548	1.3	706	5.7	11.0	360
BZW06-376	BZW06-376B	1	376	418	1	603	1.3	776	5.7	11.0	350

Fig. 1: Peak pulse power dissipation versus initial junction temperature (printed circuit board).



Note 2 : Pulse test: $t_p < 50$ ms.

Note 3 : $\Delta V_{BR} = \alpha T * (T_{amb} - 25) * V_{BR}(25^{\circ}C)$

Note 4 : $V_R = 0$ V, $F = 1$ MHz. For bidirectional types, capacitance value is divided by 2

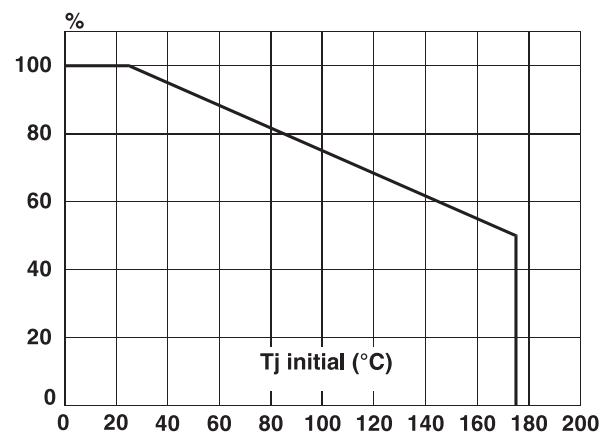


Fig. 2 : Peak pulse power versus exponential pulse duration.

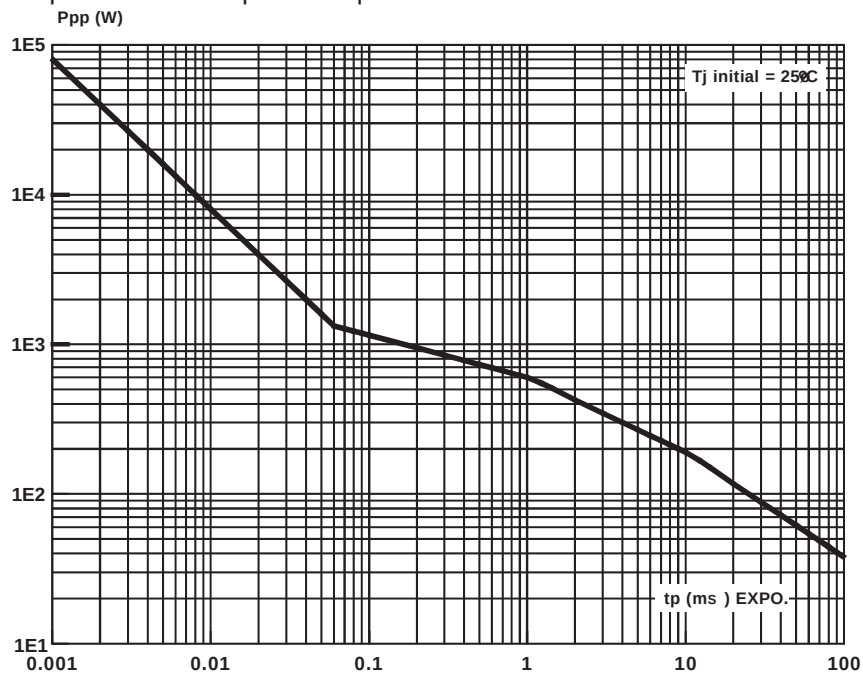
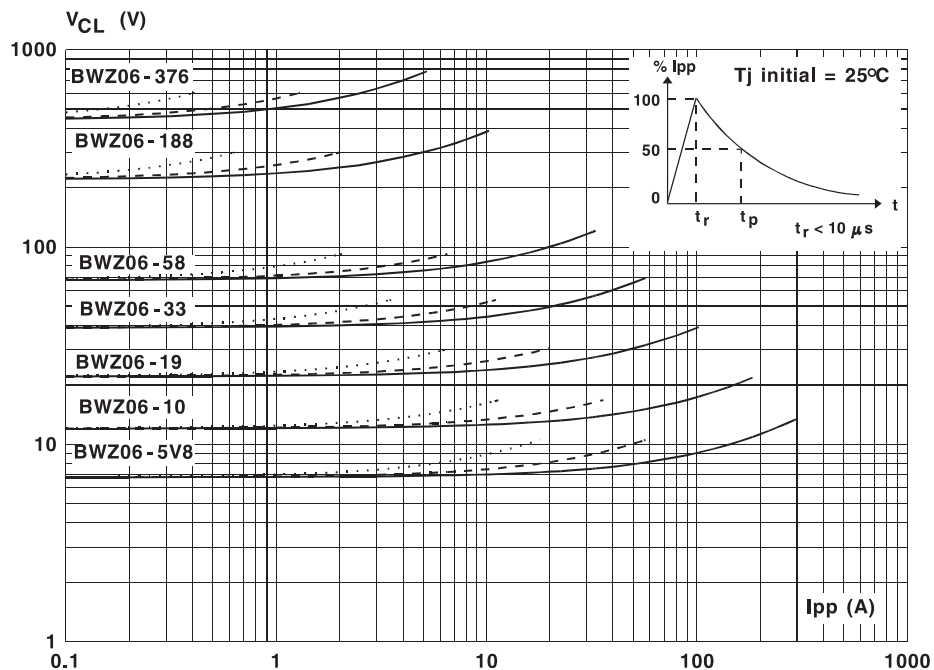


Fig. 3 : Clamping voltage versus peak pulse current.

Exponential waveform $t_p = 20 \mu\text{s}$ _____
 $t_p = 1 \text{ ms}$ _____
 $t_p = 10 \text{ m.....}$



Note : The curves of the figure 3 are specified for a junction temperature of 25°C before surge.
 The given results may be extrapolated for other junction temperatures by using the following formula :
 $\Delta V_{BR} = \alpha T * (T_{amb} - 25) * V_{BR} (25^\circ\text{C})$.
 For intermediate voltages, extrapolate the given results.

Fig. 4a : Capacitance versus reverse applied voltage for unidirectional types (typical values).

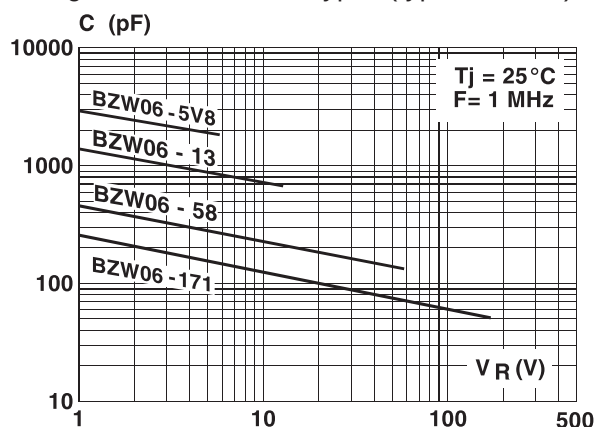


Fig. 4b : Capacitance versus reverse applied voltage for bidirectional types (typical values).

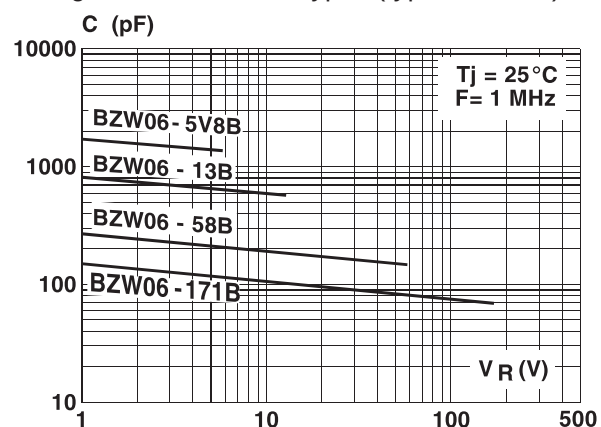


Fig. 5 : Peak forward voltage drop versus peak forward current (typical values for unidirectional types).

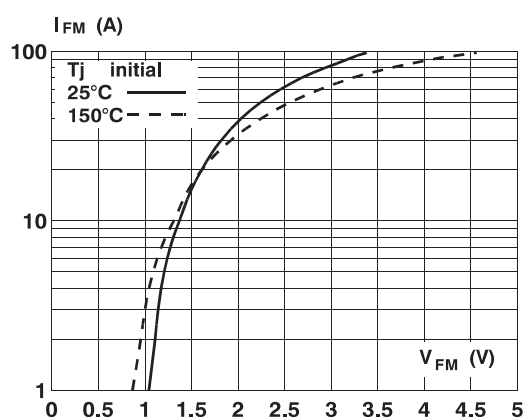


Fig. 6 : Transient thermal impedance junction ambient versus pulse duration (For FR4 PC Board with L lead = 10mm).

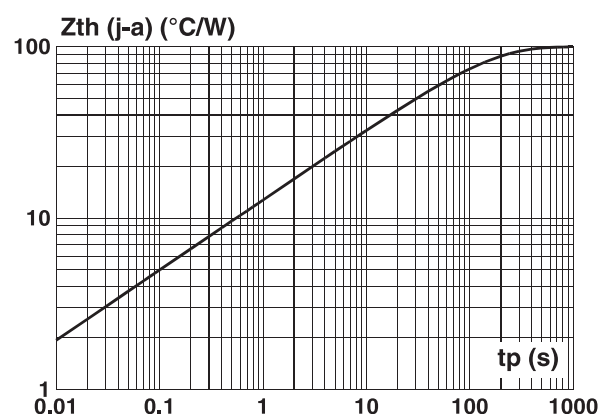
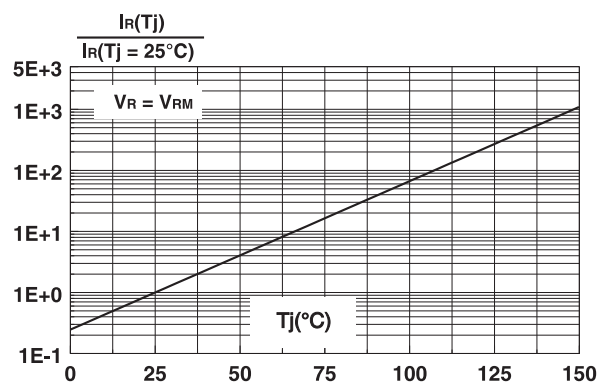
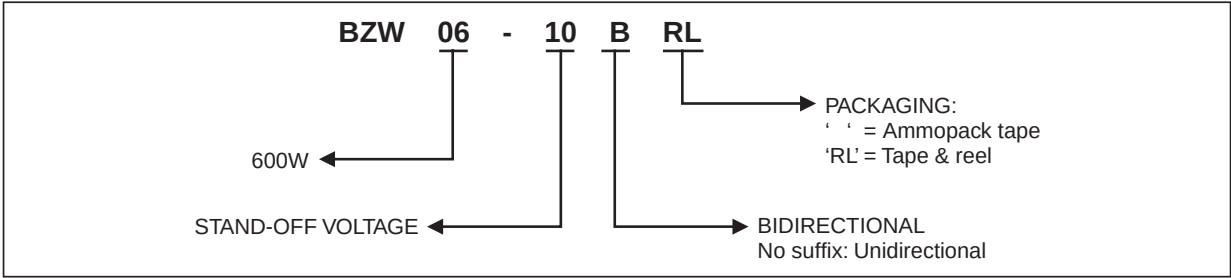


Fig. 7 : Relative variation of leakage current versus junction temperature.



BZW06-xx

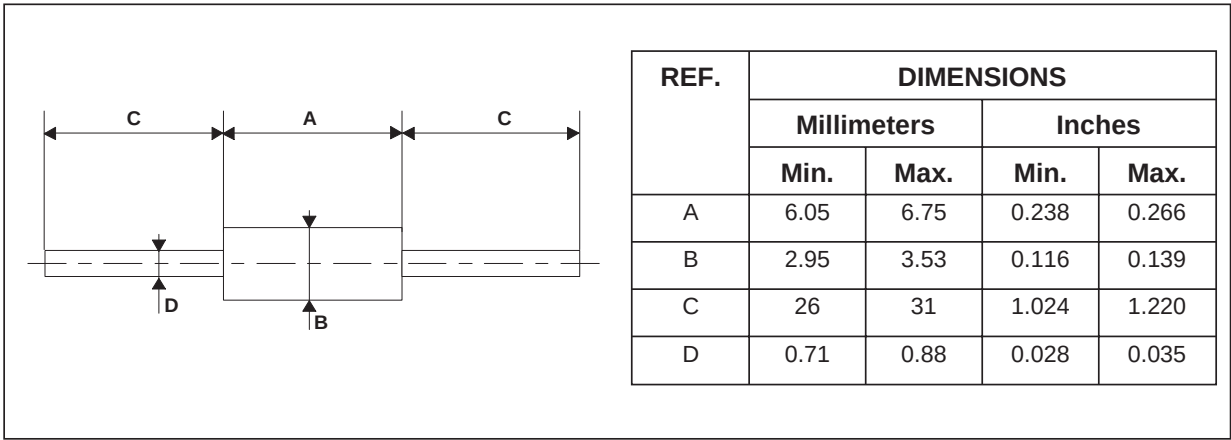
ORDER



MARKING : Logo, Date Code, Type Code, Cathode Band (for unidirectional types only).

PACKAGE MECHANICAL DATA

DO-15 (Plastic)



Packaging : standard packaging is in tape and reel.

Weight = 0.4 g.

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