

Transient Voltage Suppressors

(continued)

SMBJ5V0(C)A - SMBJ170(C)A

Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

Uni-directional Bi-directional (C) Device	Part Marking*	Reverse Stand-off Voltage V_{RWM} (V)	Breakdown Voltage V_{BR} (V)		Test Current I_T (mA)	Clamping Voltage @ I_{PPM} V_C (V)	Peak Pulse Current I_{PPM} (A)	Reverse Leakage @ V_{RWM} I_R (uA)**
			min	max				
SMBJ5V0(C)A	KE	5.0	6.40	7.0	10	9.2	65.2	800
SMBJ6V0(C)A	KG	6.0	6.67	7.37	10	10.3	58.3	800
SMBJ6V5(C)A	KK	6.5	7.22	7.98	10	11.2	53.6	500
SMBJ7V0(C)A	KM	7.0	7.78	8.60	10	12.0	50.0	200
SMBJ7V5(C)A	KP	7.5	8.33	9.21	1	12.9	46.5	100
SMBJ8V0(C)A	KR	8.0	8.89	9.83	1	13.6	44.1	50
SMBJ8V5(C)A	KT	8.5	9.44	10.4	1	14.4	41.7	20
SMBJ9V0(C)A	KV	9.0	10.0	11.1	1	15.4	39.0	10
SMBJ10(C)A	KX	10	11.1	12.8	1	17.0	35.3	5
SMBJ11(C)A	KZ	11	12.2	13.5	1	18.2	33.0	5
SMBJ12(C)A	LE	12	13.3	14.7	1	19.9	30.2	5
SMBJ13(C)A	LG	13	14.4	15.9	1	21.5	27.9	5
SMBJ14(C)A	LK	14	15.6	17.2	1	23.2	25.9	5
SMBJ15(C)A	LM	15	16.7	18.5	1	24.4	24.6	5
SMBJ16(C)A	LP	16	17.8	19.7	1	26.0	23.1	5
SMBJ17(C)A	LR	17	18.9	20.9	1	27.6	21.7	5
SMBJ18(C)A	LT	18	20.0	22.1	1	29.2	20.5	5
SMBJ20(C)A	LV	20	22.2	24.5	1	32.4	18.5	5
SMBJ22(C)A	LX	22	24.4	26.9	1	35.5	16.9	5
SMBJ24(C)A	LZ	24	26.7	29.5	1	38.9	15.4	5
SMBJ26(C)A	ME	26	28.9	31.9	1	42.1	14.3	5
SMBJ28(C)A	MG	28	31.1	34.4	1	45.4	13.2	5
SMBJ30(C)A	MK	30	33.3	36.8	1	48.4	12.4	5
SMBJ33(C)A	MM	33	36.7	40.6	1	53.3	11.3	5
SMBJ36(C)A	MP	36	40.0	44.2	1	58.1	10.3	5
SMBJ40(C)A	MR	40	44.4	49.1	1	64.5	9.3	5
SMBJ43(C)A	MT	43	47.8	52.8	1	69.4	8.6	5
SMBJ45(C)A	MV	45	50.0	55.3	1	72.7	8.3	5
SMBJ48(C)A	MX	48	53.3	58.9	1	77.4	7.8	5
SMBJ51(C)A	MZ	51	56.7	62.7	1	82.4	7.3	5
SMBJ54(C)A	NE	54	60.0	66.3	1	87.1	6.9	5
SMBJ58(C)A	NG	58	64.4	71.2	1	93.6	6.4	5
SMBJ60(C)A	NK	60	66.7	73.7	1	96.8	6.2	5
SMBJ64(C)A	NM	64	71.1	78.6	1	103.0	5.8	5
SMBJ70(C)A	NP	70	77.8	86.0	1	113.0	5.3	5
SMBJ75(C)A	NR	75	83.3	92.1	1	121.0	5.0	5
SMBJ78(C)A	NT	78	86.7	95.8	1	126.0	4.8	5
SMBJ85(C)A	NV	85	94.4	104.0	1	137.0	4.4	5
SMBJ90(C)A	NX	90	100.0	111.0	1	146.0	4.1	5
SMBJ100(C)A	NZ	100	111.0	123.0	1	162.0	3.7	5
SMBJ110(C)A	PE	110	122.0	135.0	1	177.0	3.4	5
SMBJ120(C)A	PG	120	133.0	147.0	1	193.0	3.1	5
SMBJ130(C)A	PK	130	144.0	159.0	1	209.0	2.9	5
SMBJ150(C)A	PM	150	167.0	185.0	1	243.0	2.5	5
SMBJ160(C)A	PP	160	178.0	197.0	1	259.0	2.3	5
SMBJ170(C)A	PR	170	189.0	209.0	1	275.0	2.2	5

* Color band denotes cathode on unidirectional devices only. No color band on bidirectional devices.

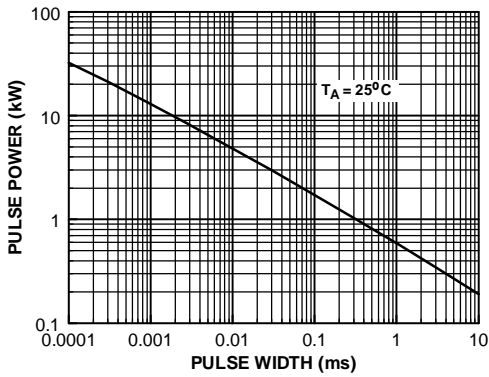
** For bidirectional parts with $V_{RWM} < 10\text{V}$, the I_R max limit is doubled.

Transient Voltage Suppressors (continued)

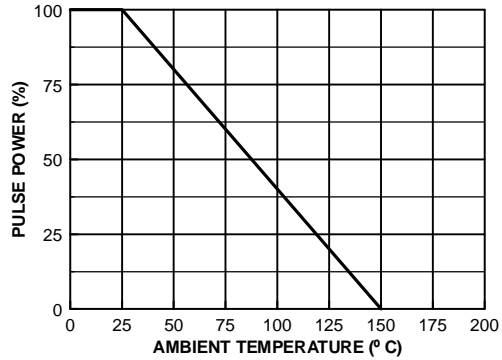
SMBJ5V0(C)A - SMBJ170(C)A

Typical Characteristics

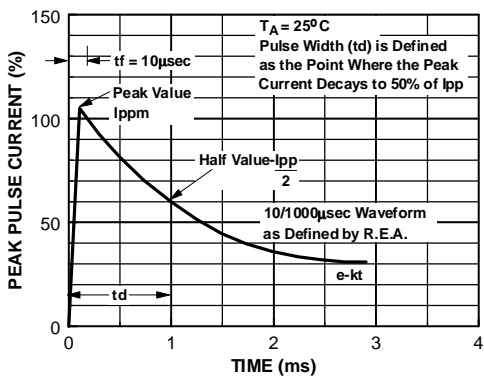
Peak Pulse Power Rating Curve



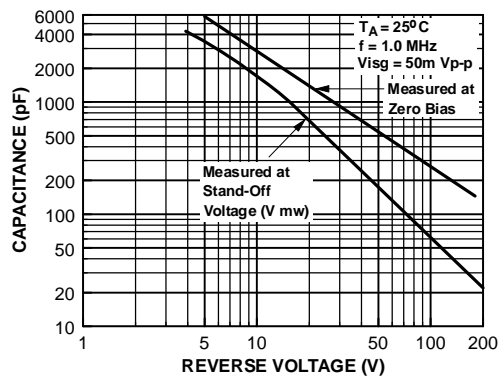
Pulse Derating Curve



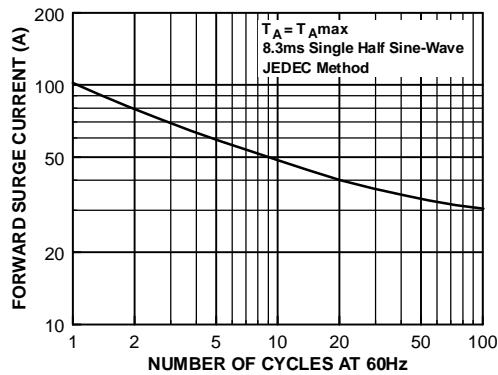
Pulse Waveform



Junction Capacitance



Non-Repetitive Surge Current



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