Transient Suppression Diodes

For General Purpose Use

GENERAL DESCRIPTION

The SMAJ, SMBJ, and SMCJ Series are a popular format of general purpose transient voltage suppression diodes. They are based on the low leakage, high reliability, but low cost glass passivated chip rectifier technology.

FEATURES

- Glass passivated chip
- 400W, 600W and 1500W types (10/1000us)
- Low leakage
- Flat clamping
- Very fast response time
- Halogen Free
- ≤1µA leakage for 12V and up
- Lead-Free Terminations

APPLICATIONS

- Consumer
- Industrial
- Telecom
- Computer

HOW TO ORDER

SMAJ **12** **CA**

Series
SMAJ = 400W
SMBJ = 600W
SMCJ = 1500W

Voltage$_{WM}$
5V - 440V

C = Bi-directional, 5% Voltage Tolerance
A = Uni-directional, 5% Voltage Tolerance

MAXIMUM RATINGS

RATING	SYMBOL	SMAJ	SMBJ	SMCJ	UNITS
Peak power dissipation with a 10/1000us waveform[1]	P_{PPM}	400	600	1500	Watts
Peak pulse current with a 10/1000us waveform[1]	I_{PPM}	See tables			Amps
Power dissipation on infinite heat sink at TL = 75ºC	P_D	1.0	5.0	6.5	Watts
Peak forward surge current,8.3ms single half sine-wave unidirectional only[2]	I_{FSM}	40	100	200	Amps
Operating junction and storage temperature range	T_J, T_{STG}	-55 ~ 150	-55 ~ 150	-55 ~ 150	ºC
Typical thermal resistance junction to air	θ_{JA}	120	100	75	ºC/W
Typical thermal resistance junction to case	θ_{JC}	30	20	15	ºC/W

NOTES:
1. Non-repetitive current pulse per Fig. 5 and derated above T_A = 25ºC per Fig. 1
2. Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

Transient Suppression Diodes

For General Purpose Use

SMAJ SERIES PARAMETERS

SMAJ Part Number		Device Marking Code		Working Peak Reverse Voltage V_{RWM}	Breakdown Voltage V_{BR} @I_T			Maximum Clamping Voltage V_C (V)	Maximum Reverse Surge Current	Maximum Reverse Leakage I_R (µA)
UNI-POLAR	BI-POLAR	UNI	BI	(V)	Min. (V)	Max. (V)	IT (mA)	@ I_{PP}	@10 x 1000µs	@V_{RWM}
SMAJ5.0A	SMAJ5.0CA	AE	WE	5	6.4	7	10	9.2	43.48	800
SMAJ6.0A	SMAJ6.0CA	AG	WG	6	6.7	7.37	10	10.3	38.83	800
SMAJ6.5A	SMAJ6.5CA	AK	WK	6.5	7.2	7.98	10	11.2	35.71	500
SMAJ7.0A	SMAJ7.0CA	AM	WM	7	7.8	8.6	10	12	33.33	200
SMAJ7.5A	SMAJ7.5CA	AP	WP	7.5	8.3	9.21	1	12.9	31.01	100
SMAJ8.0A	SMAJ8.0CA	AR	WR	8	8.9	9.83	1	13.6	29.41	50
SMAJ8.5A	SMAJ8.5CA	AT	WT	8.5	9.4	10.4	1	14.4	27.78	10
SMAJ9.0A	SMAJ9.0CA	AV	WV	9	10	11.1	1	15.4	25.97	1
SMAJ10A	SMAJ10CA	AX	WX	10	11.1	12.3	1	17	23.53	1
SMAJ11A	SMAJ11CA	AZ	WZ	11	12.2	13.5	1	18.2	21.98	1
SMAJ12A	SMAJ12CA	BE	XE	12	13.3	14.7	1	19.9	20.1	1
SMAJ13A	SMAJ13CA	BG	XG	13	14.4	15.9	1	21.5	18.6	1
SMAJ14A	SMAJ14CA	BK	XK	14	15.6	17.2	1	23.2	17.24	1
SMAJ15A	SMAJ15CA	BM	XM	15	16.7	18.5	1	24.4	16.39	1
SMAJ16A	SMAJ16CA	BP	XP	16	17.8	19.7	1	26	15.38	1
SMAJ17A	SMAJ17CA	BR	XR	17	18.9	20.9	1	27.6	14.49	1
SMAJ18A	SMAJ18CA	BT	XT	18	20	22.1	1	29.2	13.7	1
SMAJ19A	SMAJ19CA	BB	XB	19	21.1	23.3	1	30.8	13	1
SMAJ20A	SMAJ20CA	BV	XV	20	22.2	24.5	1	32.4	12.35	1
SMAJ22A	SMAJ22CA	BX	XX	22	24.4	26.9	1	35.5	11.27	1
SMAJ24A	SMAJ24CA	BZ	XZ	24	26.7	29.5	1	38.9	10.28	1
SMAJ26A	SMAJ26CA	CE	YE	26	28.9	31.9	1	42.1	9.5	1
SMAJ28A	SMAJ28CA	CG	YG	28	31.1	34.4	1	45.4	8.81	1
SMAJ30A	SMAJ30CA	CK	YK	30	33.3	36.8	1	48.4	8.26	1
SMAJ33A	SMAJ33CA	CM	YM	33	36.7	40.6	1	53.3	7.5	1
SMAJ36A	SMAJ36CA	CP	YP	36	40	44.2	1	58.1	6.88	1
SMAJ40A	SMAJ40CA	CR	YR	40	44.4	49.1	1	64.5	6.2	1
SMAJ43A	SMAJ43CA	CT	YT	43	47.8	52.8	1	69.4	5.76	1
SMAJ45A	SMAJ45CA	CV	YV	45	50	55.3	1	72.7	5.5	1
SMAJ48A	SMAJ48CA	CX	YX	48	53.3	58.9	1	77.4	5.17	1
SMAJ51A	SMAJ51CA	CZ	YZ	51	56.7	62.7	1	82.4	4.85	1
SMAJ54A	SMAJ54CA	RE	ZE	54	60	66.3	1	87.1	4.59	1
SMAJ58A	SMAJ58CA	RG	ZG	58	64.4	71.2	1	93.6	4.27	1
SMAJ60A	SMAJ60CA	RK	ZK	60	66.7	73.7	1	96.8	4.13	1
SMAJ64A	SMAJ64CA	RM	ZM	64	71.1	78.6	1	103	3.88	1
SMAJ70A	SMAJ70CA	RP	ZP	70	77.8	86	1	113	3.54	1
SMAJ75A	SMAJ75CA	RR	ZR	75	83.3	92.1	1	121	3.31	1
SMAJ78A	SMAJ78CA	RT	ZT	78	86.7	95.8	1	126	3.17	1
SMAJ80A	SMAJ80CA	RB	ZB	80	88.8	97.6	1	130	3.09	1
SMAJ85A	SMAJ85CA	RV	ZV	85	94.4	104	1	137	2.92	1
SMAJ90A	SMAJ90CA	RX	ZX	90	100	111	1	146	2.74	1
SMAJ100A	SMAJ100CA	RZ	ZZ	100	111	123	1	162	2.47	1
SMAJ110A	SMAJ110CA	SE	VE	110	122	135	1	177	2.26	1
SMAJ120A	SMAJ120CA	SG	VG	120	133	147	1	193	2.07	1
SMAJ130A	SMAJ130CA	SK	VK	130	144	159	1	209	1.91	1
SMAJ140A	SMAJ140CA	SB	VB	140	155	171	1	227	1.76	1
SMAJ150A	SMAJ150CA	SM	VM	150	167	185	1	243	1.65	1
SMAJ160A	SMAJ160CA	SP	VP	160	178	197	1	259	1.54	1
SMAJ170A	SMAJ170CA	SR	VR	170	189	209	1	275	1.45	1
SMAJ180A	SMAJ180CA	ST	VT	180	200	220	1	292	1.37	1
SMAJ190A	SMAJ190CA	SV	VV	190	211	232	1	308	1.3	1
SMAJ200A	SMAJ200CA	SW	VW	200	224	247	1	324	1.23	1
SMAJ220A	SMAJ220CA	SX	VX	220	246	272	1	356	1.12	1
SMAJ250A	SMAJ250CA	SZ	VZ	250	279	309	1	405	0.99	1
SMAJ300A	SMAJ300CA	DE	HE	300	335	371	1	486	0.82	1
SMAJ350A	SMAJ350CA	DG	HG	350	391	432	1	567	0.71	1
SMAJ400A	SMAJ400CA	DK	HK	400	447	494	1	648	0.62	1
SMAJ440A	SMAJ440CA	DM	HM	440	492	543	1	713	0.56	1

NOTES:
1. Suffix “A” denotes 5% tolerance device.
2. Add suffix “CA” after part number to specify Bi-directional devices.
3. For Bi-Directional devices having VR of 10 volts and under, the I_R limit is double.

SMAJ SERIES RATINGS AND CHARACTERISTICS

FIG 1. PULSE DERATING CURVE

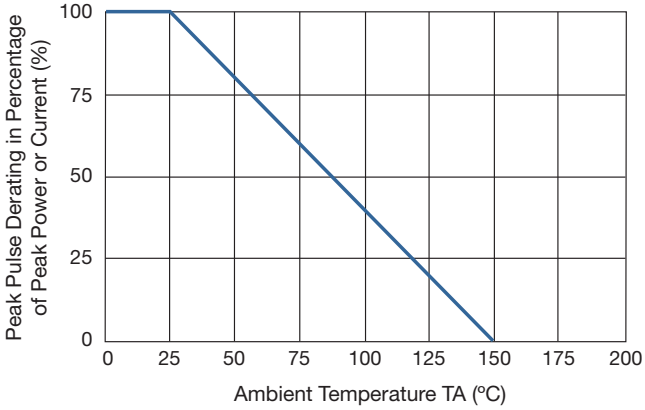


FIG 2. MAXIMUM NON-REPETITIVE

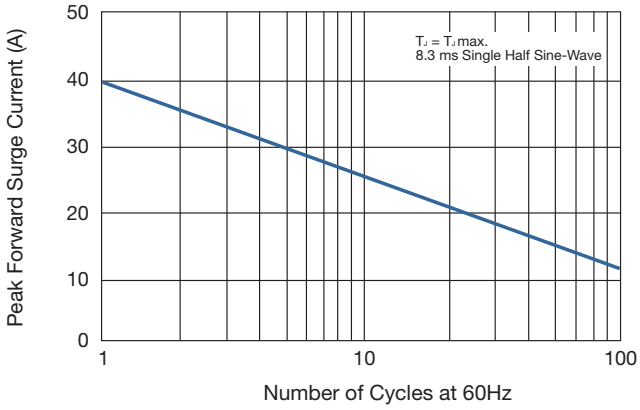


FIG 3. STEADY STATE POWER DERATING CURVE

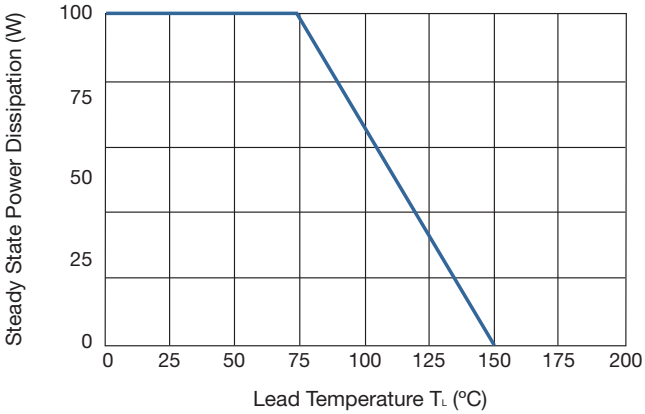


FIG 4. PEAK PULSE POWER RATING CURVE

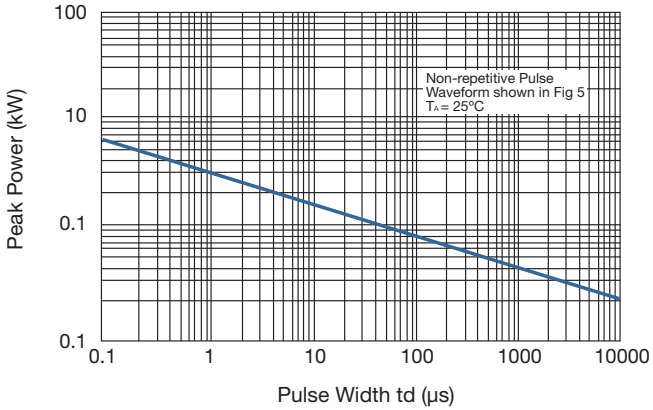
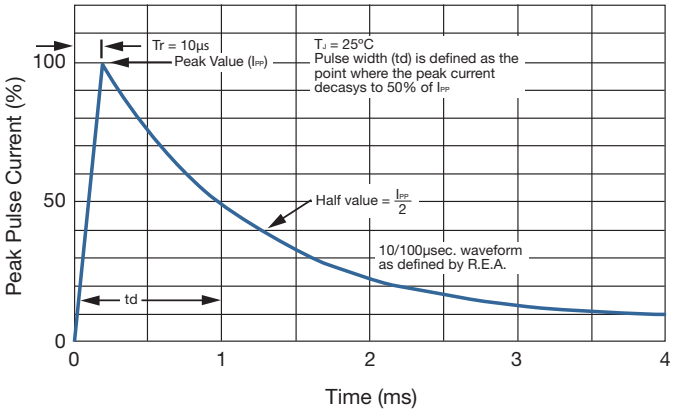


FIG 5. PULSE WAVEFORM



SMBJ SERIES PARAMETERS

SMBJ Part Number		Device Marking Code		Working Peak Reverse Voltage V_{RWM}	Breakdown Voltage V_{BR} @I_T			Maximum Clamping Voltage V_C (V)	Maximum Reverse Surge Current	Maximum Reverse Leakage I_R (µA)
UNI-POLAR	BI-POLAR	UNI	BI	(V)	Min. (V)	Max. (V)	IT (mA)	@ I_{PP}	@10 x 1000µs	@V_{RWM}
SMBJ5.0A	SMBJ5.0CA	KE	AE	5.0	6.40	7.00	10	9.2	65.22	800
SMBJ6.0A	SMBJ6.0CA	KG	AG	6.0	6.67	7.37	10	10.3	58.25	800
SMBJ6.5A	SMBJ6.5CA	KK	AK	6.5	7.22	7.98	10	11.2	53.57	500
SMBJ7.0A	SMBJ7.0CA	KM	AM	7.0	7.78	8.60	10	12.0	50.00	200
SMBJ7.5A	SMBJ7.5CA	KP	AP	7.5	8.33	9.21	1	12.9	46.51	100
SMBJ8.0A	SMBJ8.0CA	KR	AR	8.0	8.89	9.83	1	13.6	44.12	50
SMBJ8.5A	SMBJ8.5CA	KT	AT	8.5	9.44	10.4	1	14.4	41.67	10
SMBJ9.0A	SMBJ9.0CA	KV	AV	9.0	10.0	11.1	1	15.4	38.96	1
SMBJ10A	SMBJ10CA	KX	AX	10	11.1	12.3	1	17.0	35.29	1
SMBJ11A	SMBJ11CA	KZ	AZ	11	12.2	13.5	1	18.2	32.97	1
SMBJ12A	SMBJ12CA	LE	BE	12	13.3	14.7	1	19.9	30.15	1
SMBJ13A	SMBJ13CA	LG	BG	13	14.4	15.9	1	21.5	27.91	1
SMBJ14A	SMBJ14CA	LK	BK	14	15.6	17.2	1	23.2	25.86	1
SMBJ15A	SMBJ15CA	LM	BM	15	16.7	18.5	1	24.4	24.59	1
SMBJ16A	SMBJ16CA	LP	BP	16	17.8	19.7	1	26.0	23.08	1
SMBJ17A	SMBJ17CA	LR	BR	17	18.9	20.9	1	27.6	21.74	1
SMBJ18A	SMBJ18CA	LT	BT	18	20.0	22.1	1	29.2	20.55	1
SMBJ19A	SMBJ19CA	LB	BB	19	21.1	23.3	1	30.8	19.49	1
SMBJ20A	SMBJ20CA	LV	BV	20	22.2	24.5	1	32.4	18.52	1
SMBJ22A	SMBJ22CA	LX	BX	22	24.4	26.9	1	35.5	16.90	1
SMBJ24A	SMBJ24CA	LZ	BZ	24	26.7	29.5	1	38.9	15.42	1
SMBJ26A	SMBJ26CA	ME	CE	26	28.9	31.9	1	42.1	14.25	1
SMBJ28A	SMBJ28CA	MG	CG	28	31.1	34.4	1	45.4	13.22	1
SMBJ30A	SMBJ30CA	MK	CK	30	33.3	36.8	1	48.4	12.40	1
SMBJ33A	SMBJ33CA	MM	CM	33	36.7	40.6	1	53.3	11.26	1
SMBJ36A	SMBJ36CA	MP	CP	36	40.0	44.2	1	58.1	10.33	1
SMBJ40A	SMBJ40CA	MR	CR	40	44.4	49.1	1	64.5	9.30	1
SMBJ43A	SMBJ43CA	MT	CT	43	47.8	52.8	1	69.4	8.65	1
SMBJ45A	SMBJ45CA	MV	CV	45	50.0	55.3	1	72.7	8.25	1
SMBJ48A	SMBJ48CA	MX	CX	48	53.3	58.9	1	77.4	7.75	1
SMBJ51A	SMBJ51CA	MZ	CZ	51	56.7	62.7	1	82.4	7.28	1
SMBJ54A	SMBJ54CA	NE	DE	54	60.0	66.3	1	87.1	6.89	1
SMBJ58A	SMBJ58CA	NG	DG	58	64.4	71.2	1	93.6	6.41	1
SMBJ60A	SMBJ60CA	NK	DK	60	66.7	73.7	1	96.8	6.20	1
SMBJ64A	SMBJ64CA	NM	DM	64	71.1	78.6	1	103	5.83	1
SMBJ70A	SMBJ70CA	NP	DP	70	77.8	86.0	1	113	5.31	1
SMBJ75A	SMBJ75CA	NR	DR	75	83.3	92.1	1	121	4.96	1
SMBJ78A	SMBJ78CA	NT	DT	78	86.7	95.8	1	126	4.76	1
SMBJ80A	SMBJ80CA	NB	DB	80	88.8	97.6	1	130	4.63	1
SMBJ85A	SMBJ85CA	NV	DV	85	94.4	104	1	137	4.38	1
SMBJ90A	SMBJ90CA	NX	DX	90	100	111	1	146	4.11	1
SMBJ100A	SMBJ100CA	NZ	DZ	100	111	123	1	162	3.70	1
SMBJ110A	SMBJ110CA	PE	EE	110	122	135	1	177	3.39	1
SMBJ120A	SMBJ120CA	PG	EG	120	133	147	1	193	3.11	1
SMBJ130A	SMBJ130CA	PK	EK	130	144	159	1	209	2.87	1
SMBJ140A	SMBJ140CA	PB	EB	140	155	171	1	227	2.65	1
SMBJ150A	SMBJ150CA	PM	EM	150	167	185	1	243	2.47	1
SMBJ160A	SMBJ160CA	PP	EP	160	178	197	1	259	2.32	1
SMBJ170A	SMBJ170CA	PR	ER	170	189	209	1	275	2.18	1
SMBJ180A	SMBJ180CA	PT	ET	180	200	220	1	292	2.06	1
SMBJ190A	SMBJ190CA	PV	EV	190	211	232	1	308	1.95	1
SMBJ200A	SMBJ200CA	PW	EW	200	224	247	1	324	1.85	1
SMBJ220A	SMBJ220CA	PX	EX	220	246	272	1	356	1.69	1
SMBJ250A	SMBJ250CA	PZ	EZ	250	279	309	1	405	1.48	1
SMBJ300A	SMBJ300CA	QE	FE	300	335	371	1	486	1.23	1
SMBJ350A	SMBJ350CA	QG	FG	350	391	432	1	567	1.06	1
SMBJ400A	SMBJ400CA	QK	FK	400	447	494	1	648	0.93	1
SMBJ440A	SMBJ440CA	QM	FM	440	492	543	1	713	0.84	1

NOTES:
1. Suffix “A” denotes 5% tolerance device.
2. Add suffix “CA” after part number to specify Bi-directional devices.
3. For Bi-Directional devices having VR of 10 volts and under, the I_R limit is double.

SMBJ SERIES RATINGS AND CHARACTERISTICS

FIG 1. PULSE DERATING CURVE

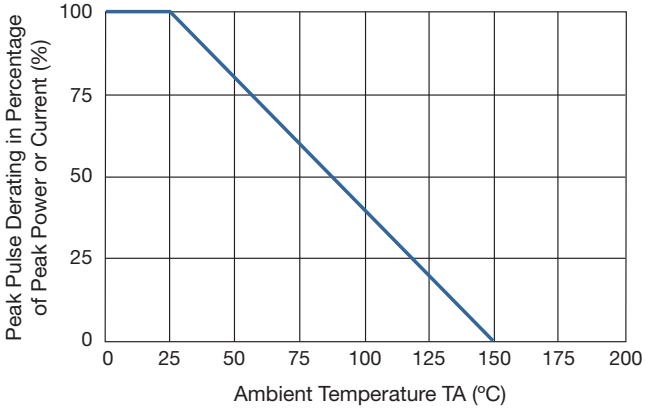


FIG 2. MAXIMUM NON-REPETITIVE

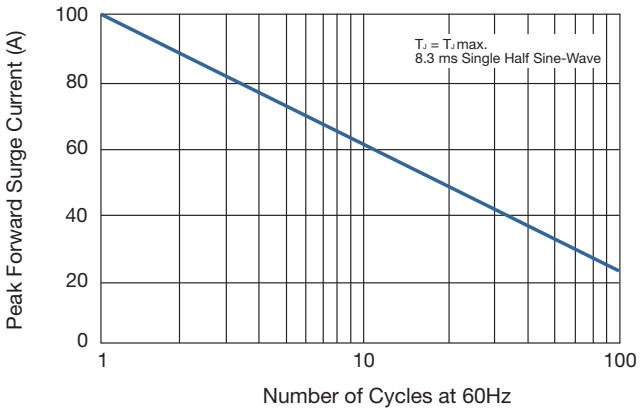


FIG 3. STEADY STATE POWER DERATING CURVE

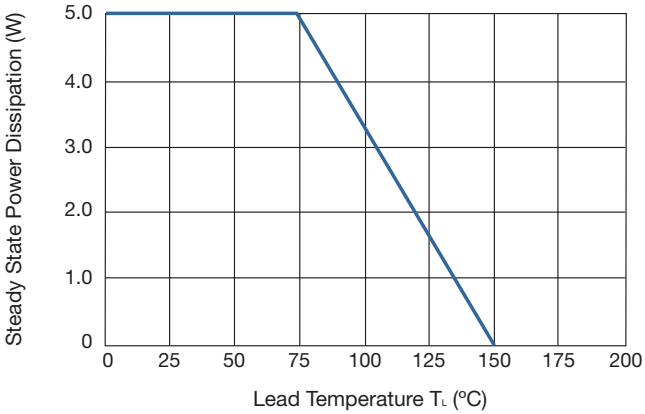


FIG 4. PEAK PULSE POWER RATING CURVE

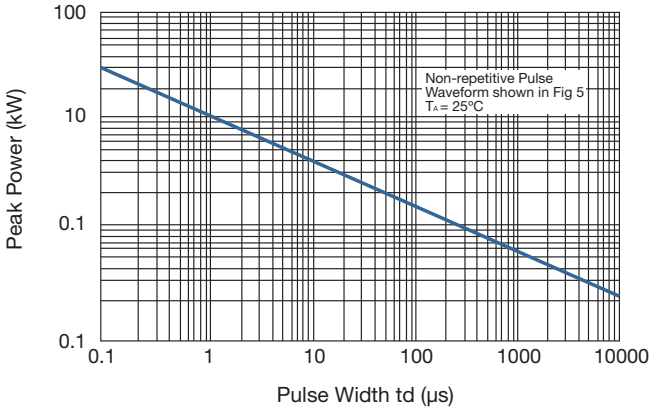
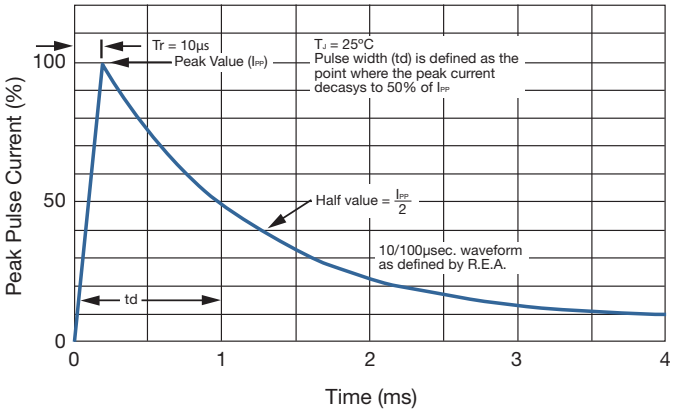


FIG 5. PULSE WAVEFORM



SMCJ SERIES PARAMETERS

SMCJ Part Number		Device Marking Code		Working Peak Reverse Voltage V_{RWM}	Breakdown Voltage V_{BR} @I_T			Maximum Clamping Voltage V_C (V)	Maximum Reverse Surge Current	Maximum Reverse Leakage I_R (µA)
UNI-POLAR	BI-POLAR	UNI	BI	(V)	Min. (V)	Max. (V)	IT (mA)	@ I_{PP}	@10 x 1000µs	@V_{RWM}
SMCJ5.0A	SMCJ5.0CA	GDE	BDE	5.0	6.40	7.00	10	9.2	163.0	800
SMCJ6.0A	SMCJ6.0CA	GDG	BDG	6.0	6.67	7.37	10	10.3	145.6	800
SMCJ6.5A	SMCJ6.5CA	GDK	BDK	6.5	7.22	7.98	10	11.2	133.9	500
SMCJ7.0A	SMCJ7.0CA	GDM	BDM	7.0	7.78	8.60	10	12.0	125.0	200
SMCJ7.5A	SMCJ7.5CA	GDP	BDP	7.5	8.33	9.21	1	12.9	116.3	100
SMCJ8.0A	SMCJ8.0CA	GDR	BDR	8.0	8.89	9.83	1	13.6	110.3	50
SMCJ8.5A	SMCJ8.5CA	GDT	BDT	8.5	9.44	10.40	1	14.4	104.2	10
SMCJ9.0A	SMCJ9.0CA	GDV	BDV	9.0	10.00	11.10	1	15.4	97.4	5.0
SMCJ10A	SMCJ10CA	GDX	BDX	10	11.10	12.30	1	17.0	88.2	5.0
SMCJ11A	SMCJ11CA	GDZ	BDZ	11	12.20	13.50	1	18.2	82.4	5.0
SMCJ12A	SMCJ12CA	GEE	BEE	12	13.30	14.70	1	19.9	75.4	5.0
SMCJ13A	SMCJ13CA	GEG	BEG	13	14.40	15.90	1	21.5	69.8	5.0
SMCJ14A	SMCJ14CA	GEK	BEK	14	15.60	17.20	1	23.2	64.7	5.0
SMCJ15A	SMCJ15CA	GEM	BEM	15	16.70	18.50	1	24.4	61.5	5.0
SMCJ16A	SMCJ16CA	GEP	BEP	16	17.80	19.70	1	26.0	57.7	5.0
SMCJ17A	SMCJ17CA	GER	BER	17	18.90	20.90	1	27.6	54.3	5.0
SMCJ18A	SMCJ18CA	GET	BET	18	20.00	22.10	1	29.2	51.4	5.0
SMCJ19A	SMCJ19CA	GEB	BEB	19	21.10	23.30	1	30.8	48.7	5.0
SMCJ20A	SMCJ20CA	GEV	BEV	20	22.20	24.50	1	32.4	46.3	5.0
SMCJ22A	SMCJ22CA	GEX	BEX	22	24.40	26.90	1	35.5	42.3	5.0
SMCJ24A	SMCJ24CA	GEZ	BEZ	24	26.70	29.50	1	38.9	38.6	5.0
SMCJ26A	SMCJ26CA	GFE	BFE	26	28.90	31.90	1	42.1	35.6	5.0
SMCJ28A	SMCJ28CA	GFG	BFG	28	31.10	34.40	1	45.4	33.0	5.0
SMCJ30A	SMCJ30CA	GFK	BFK	30	33.30	36.80	1	48.4	31.0	5.0
SMCJ33A	SMCJ33CA	GFM	BFM	33	36.70	40.60	1	53.3	28.1	5.0
SMCJ36A	SMCJ36CA	GFP	BFP	36	40.00	44.20	1	58.1	25.8	5.0
SMCJ40A	SMCJ40CA	GFR	BFR	40	44.40	49.10	1	64.5	23.3	5.0
SMCJ43A	SMCJ43CA	GFT	BFT	43	47.80	52.80	1	69.4	21.6	5.0
SMCJ45A	SMCJ45CA	GFV	BFV	45	50.00	55.30	1	72.7	20.6	5.0
SMCJ48A	SMCJ48CA	GFX	BFX	48	53.30	58.90	1	77.4	19.4	5.0
SMCJ51A	SMCJ51CA	GFZ	BFZ	51	56.70	62.70	1	82.4	18.2	5.0
SMCJ54A	SMCJ54CA	GGE	BGE	54	60.00	66.30	1	87.1	17.2	5.0
SMCJ58A	SMCJ58CA	GGG	BGG	58	64.40	71.20	1	93.6	16.0	5.0
SMCJ60A	SMCJ60CA	GGK	BGK	60	66.70	73.70	1	96.8	15.5	5.0
SMCJ64A	SMCJ64CA	GGM	BGM	64	71.10	78.60	1	103	14.6	5.0
SMCJ70A	SMCJ70CA	GGP	BGP	70	77.80	86.00	1	113	13.3	5.0
SMCJ75A	SMCJ75CA	GGR	BGR	75	83.30	92.10	1	121	12.4	5.0
SMCJ78A	SMCJ78CA	GGT	BGT	78	86.70	95.80	1	126	11.9	5.0
SMCJ80A	SMCJ80CA	GGB	BGB	80	88.80	97.60	1	130	11.6	5.0
SMCJ85A	SMCJ85CA	GGV	BGV	85	94.40	104	1	137	10.9	5.0
SMCJ90A	SMCJ90CA	GGX	BGX	90	100	111	1	146	10.3	5.0
SMCJ100A	SMCJ100CA	GGZ	BGZ	100	111	123	1	162	9.3	5.0
SMCJ110A	SMCJ110CA	GHE	BHE	110	122	135	1	177	8.5	5.0
SMCJ120A	SMCJ120CA	GHG	BHG	120	133	147	1	193	7.8	5.0
SMCJ130A	SMCJ130CA	GHK	BHK	130	144	159	1	209	7.2	5.0
SMCJ140A	SMCJ140CA	GHB	BHB	140	155	171	1	227	6.6	5.0
SMCJ150A	SMCJ150CA	GHM	BHM	150	167	185	1	243	6.2	5.0
SMCJ160A	SMCJ160CA	GHP	BHP	160	178	197	1	259	5.8	5.0
SMCJ170A	SMCJ170CA	GHR	BHR	170	189	209	1	275	5.5	5.0
SMCJ180A	SMCJ180CA	GHT	BHT	180	200	220	1	291	5.1	5.0
SMCJ190A	SMCJ190CA	GHV	BHV	190	211	232	1	308	4.9	5.0
SMCJ200A	SMCJ200CA	GHW	BHW	200	224	247	1	324	4.6	5.0
SMCJ220A	SMCJ220CA	GHX	BHX	220	246	272	1	356	4.2	5.0
SMCJ250A	SMCJ250CA	GHZ	BHZ	250	279	309	1	405	3.7	5.0
SMCJ300A	SMCJ300CA	GJE	BJE	300	335	371	1	486	3.1	5.0
SMCJ350A	SMCJ350CA	GJG	BJG	350	391	432	1	567	2.6	5.0
SMCJ400A	SMCJ400CA	GJK	BJK	400	447	494	1	648	2.3	5.0
SMCJ440A	SMCJ440CA	GJM	BJM	440	492	543	1	713	2.1	5.0

NOTES:
1. Suffix “A” denotes 5% tolerance device.
2. Add suffix “CA” after part number to specify Bi-directional devices.
3. For Bi-Directional devices having VR of 10 volts and under, the I_R limit is double.

SMCJ SERIES RATINGS AND CHARACTERISTICS

FIG 1. PULSE DERATING CURVE

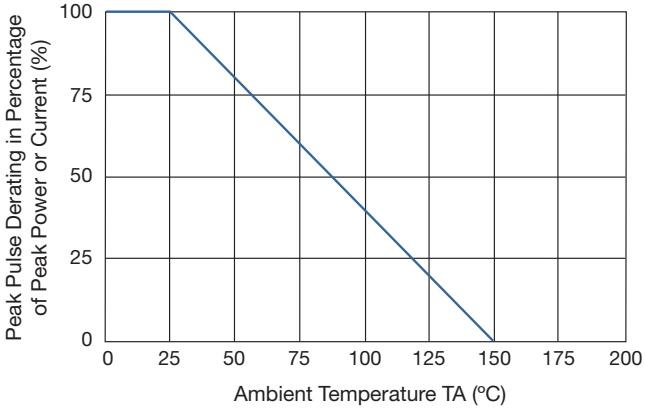


FIG 2. MAXIMUM NON-REPETITIVE

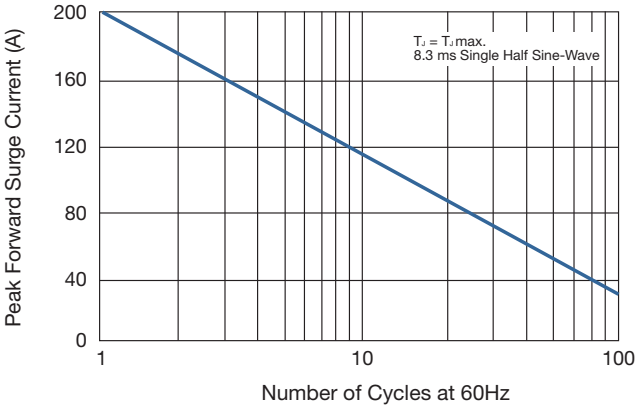


FIG 3. STEADY STATE POWER DERATING CURVE

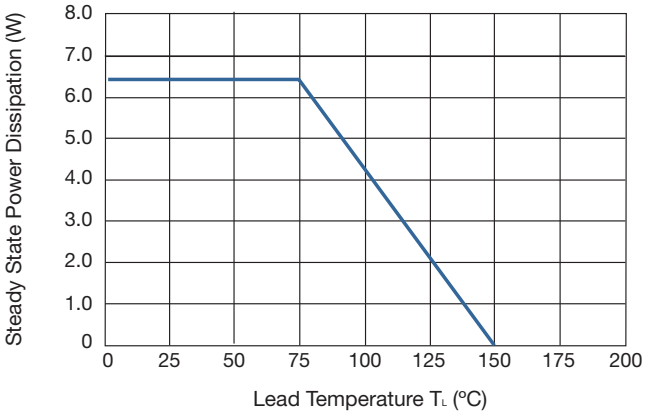


FIG 4. PEAK PULSE POWER RATING CURVE

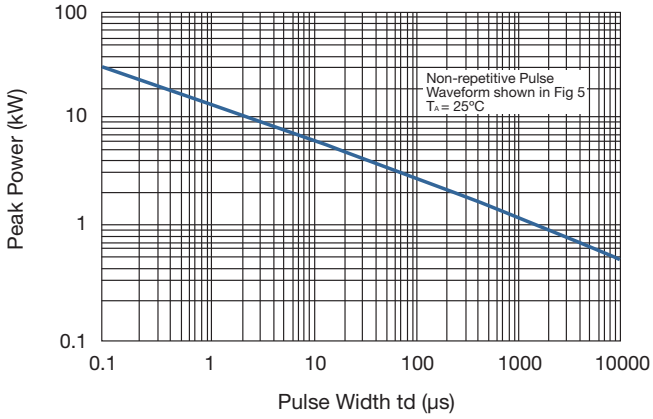
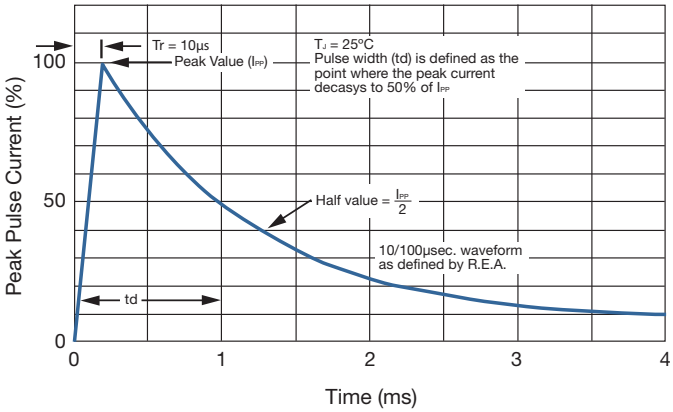
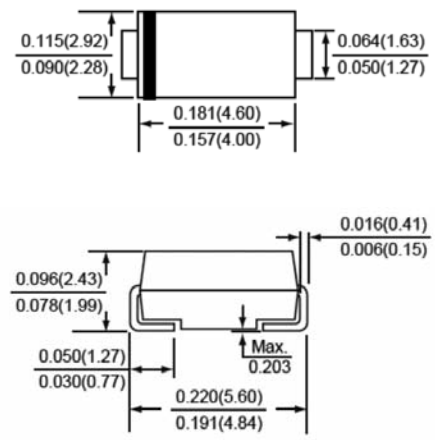


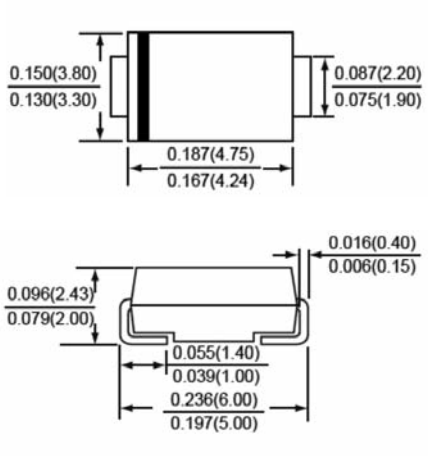
FIG 5. PULSE WAVEFORM



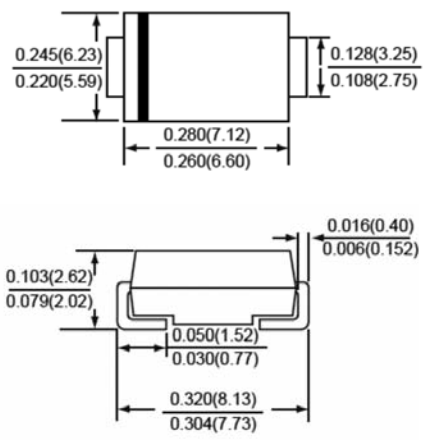
COMPONENT DIMENSIONS



SMA/DO-214AC

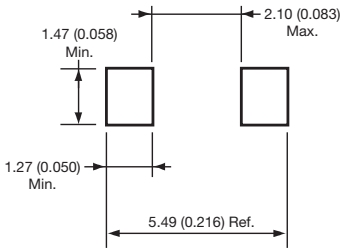


SMB/DO-214AA

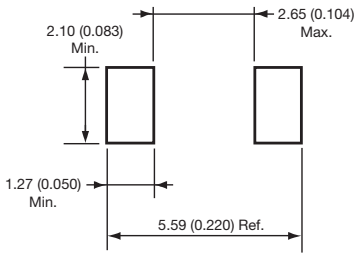


SMC/DO-214AB

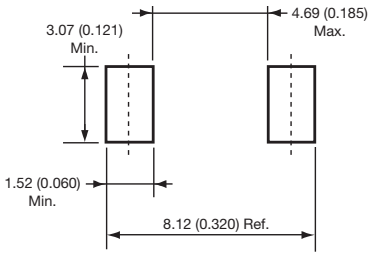
RECOMMENDED PAD DIMENSIONS



DO-214AC (SMA)



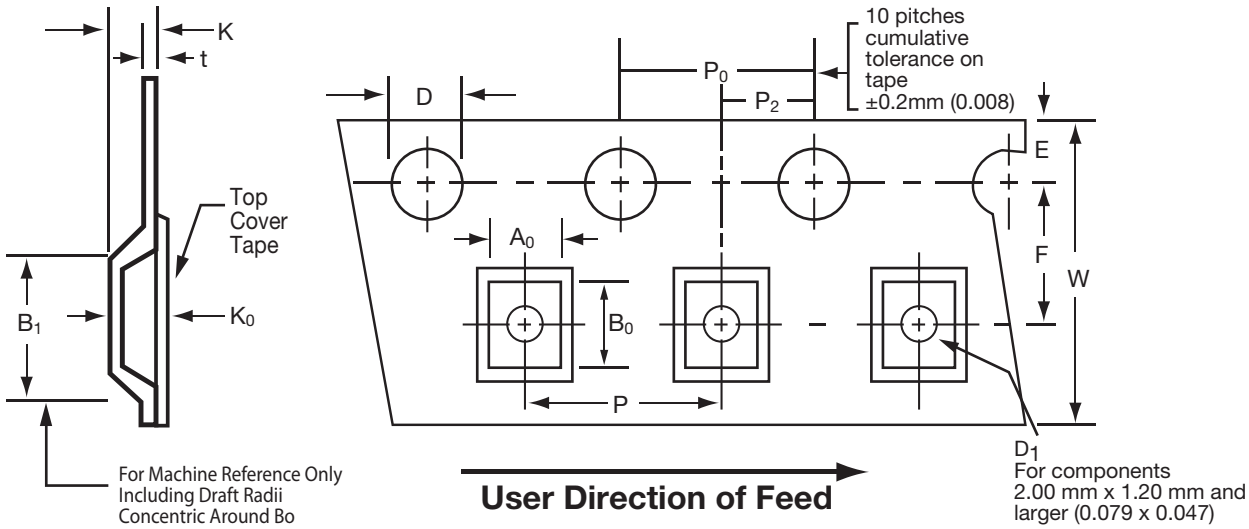
DO-214AA (SMB)



DO-214AB (SMC)

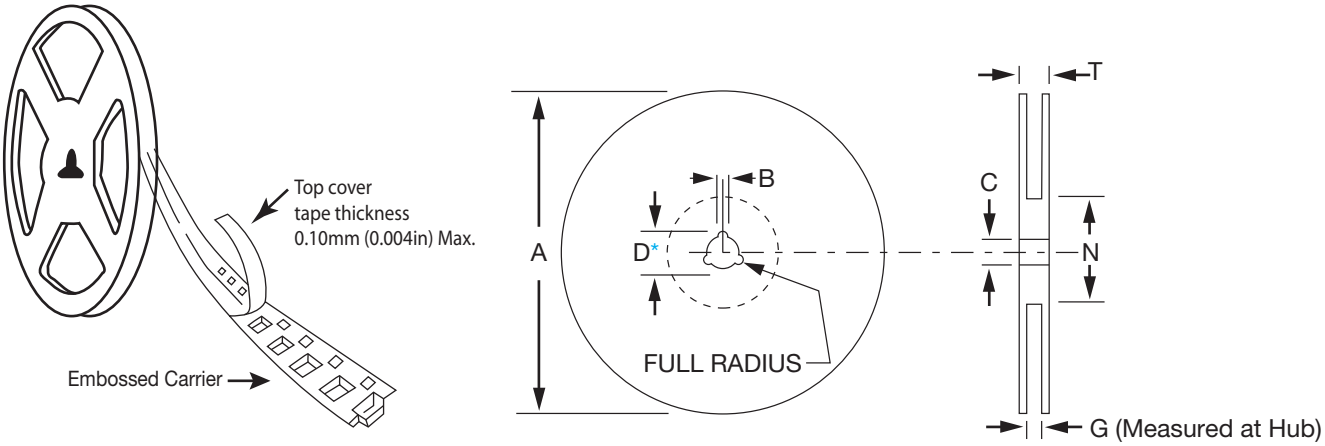
PACKAGING SPECIFICATIONS FOR SMA, SMB, SMC SERIES OR GENERAL PURPOSE TRANSIENT VOLTAGE SUPPRESSION DIODES

CARRIER TAPE



SYMBOL	SPECIFICATIONS			
	Unit	SMA	SMB	SMC
W	mm	12.0±0.3	12.0±0.3	16.0±0.3
D	mm	1.55±0.1-0.0	1.55±0.1-0.0	1.55±0.1-0.0
E	mm	1.75±0.10	1.75±0.10	1.75±0.10
P0	mm	4.0±0.10	4.0±0.10	4.0±0.10
t (Max)	mm	0.400	0.400	0.400
A0	mm	2.79±0.10	3.67±0.10	6.05±0.10
B0	mm	5.33±0.10	5.69±0.10	8.31±0.10
K0	mm	2.36±0.10	2.67±0.10	2.54±0.10
B1 (Max)	mm	8.2	8.2	12.1
D1 (Min)	mm	1.5	1.5	1.5
F	mm	5.5±0.05	5.5±0.05	7.5±0.05
K (Max)	mm	4.5	4.5	3.29
P2	mm	2.0±0.05	2.0±0.05	2.0±0.05
P	mm	4.0±0.10	8.0±0.10	8.0±0.10

REEL



SYMBOL	SPECIFICATIONS			
	Unit	SMA	SMB	SMC
Tape size	mm	12	12	16
A	inch	13	13	13
B (max)	mm	1.5	1.5	1.5
C	mm	13±0.2	13±0.2	13±0.2
D (max)	mm	20.2	20.2	20.2
N (min)	mm	50	50	50
G	mm	12.4 +2.0/0.0	12.4 +2.0/-0.0	16.4 +2.0/-0.0
T (max)	mm	18.4	18.4	22.4

QUANTITIES

SYMBOL	SPECIFICATIONS			
	Unit	SMA	SMB	SMC
Qty per reel	k	7.5	3	3
Weight per reel	kg	0.85	0.6	1.2