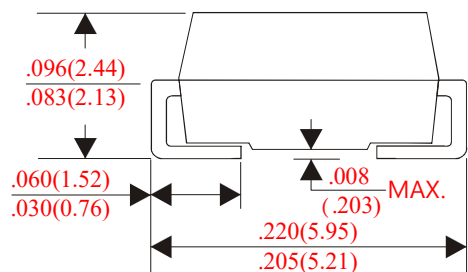
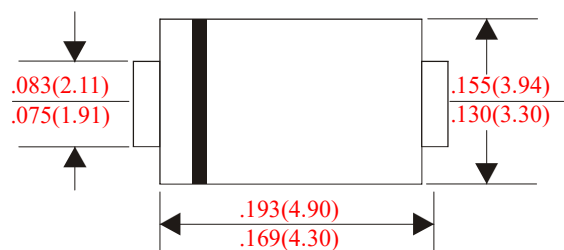


OUTLINE

SMB



Dimensions in inches and (millimeters)

FEATURES

- For surface mount applicatio.
- Built-in strain relief.
- Excellent clamping capability.
- Low profile package.
- Fast response time.
- Typical I_r less than 1mA above 10V.
- High temperature soldering guaranteed.
260°C / 10 seconds at terminals

MECHANICAL DATA

- Case: SMB Molded Plastic
- Terminals: Solder Plated
- Polarity: Band denotes cathode
- Mounting position: Any
- Weight: 0.003 ounce, 93 milligram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Single, half wave, 60Hzm resistive or inductive load.
For capacitive load, derate current by 20%

Parameter	Symbols	Value	Units
Peak Power Dissipation at $T_A=25^\circ\text{C}$, $T_P=1\text{ms}$ (NOTE 1)	P_{PK}	600	Watts
Peak Forward Surge Current at 8.3ms Single Half Sine-Wave superimposed on rated load (JEDEC method) (NOTE 3)	I_{FSM}	100	Amp
Maximum Instantaneous Forward Voltage at 35.0A for Unidirectional only	V_F	3.5	Volts
Operating Junction Temperature Range	T_J	-55 ~ +150	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

NOTE :

- 1.Non-repetitive current pulse per Fig. 3 and derated above $T_A=25^\circ\text{C}$ per Fig. 2.
- 2.Mounted on Copper Pad area of 5.0mm (.013mm Thick) to each terminal.
- 3.8.3ms single half sine-wave, duty cycle = 4 pulses per minute maximum.

DEVICES FOR BIPOLAR APPLICATIONS

1. For Bidirectional use C or CA Suffix for types SMBJ5.0 thru SMBJ170.
2. Electrical characteristics apply in both directions.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-PEAK PULSE POWER DERATING CURVE

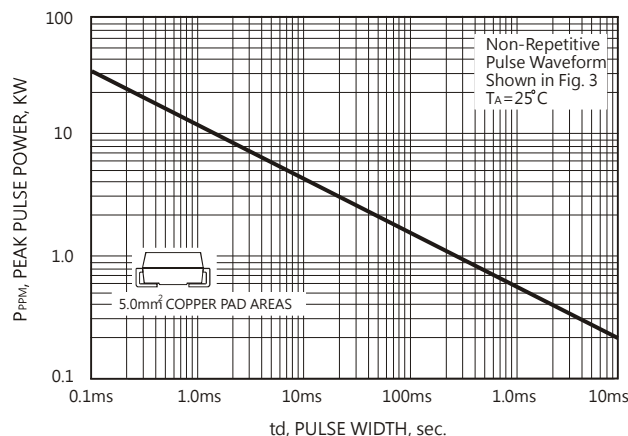


FIG.2-PULSE DERATING CURVE

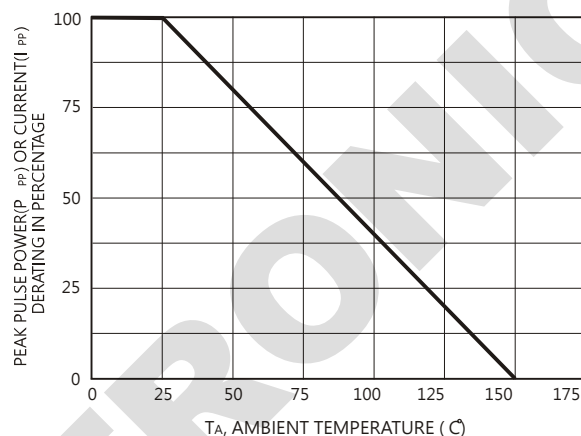


FIG.3-PULSE WAVE FORM

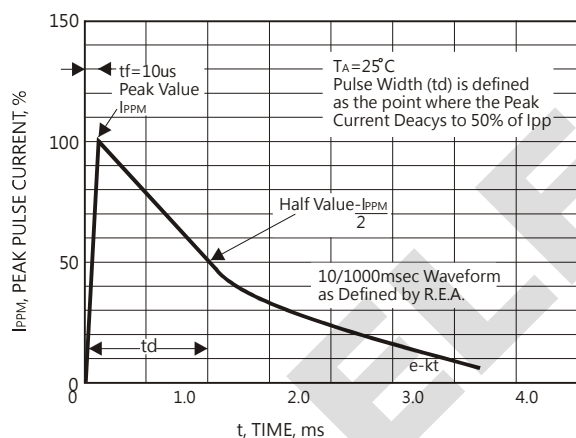


FIG.4-TYPICAL JUNCTION CAPACITANCE

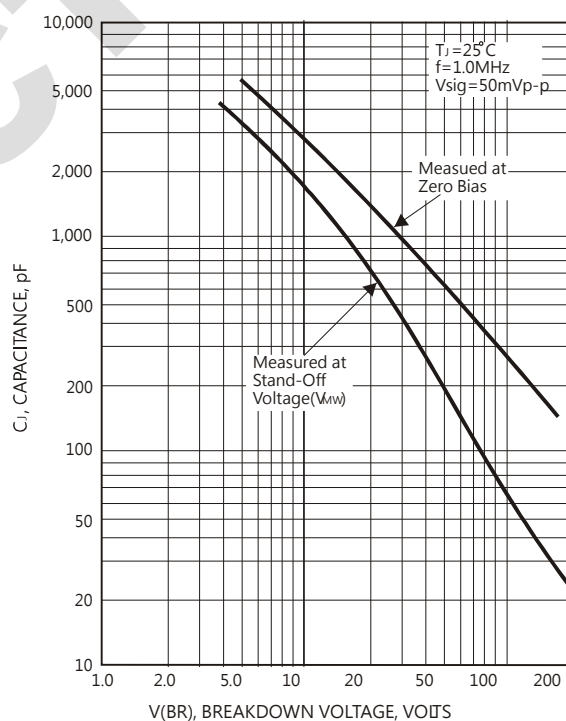
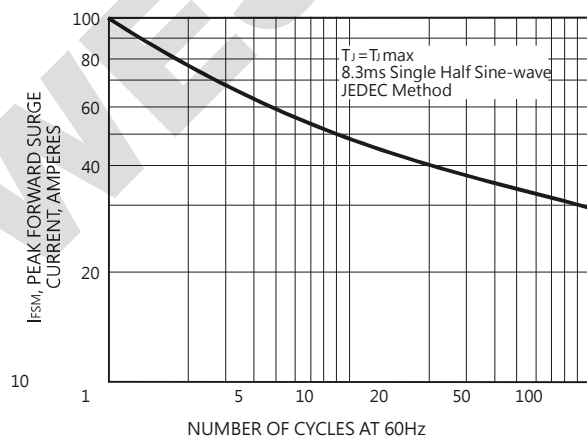


FIG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



Part number (uni)	Part number (bi)	VRWM (V)	VBR@IT (V)		IT (mA)	IR@ VRWM (μA)	VC @IPP(V)	IPP (A)	Marking Code	
			Min	Max					uni	bi
SMBJ5.0A	SMBJ5.0CA	5.0	6.40	7.00	10	800	9.2	65.3	BJ5.0A	BJ5.0CA
SMBJ6.0A	SMBJ6.0CA	6.0	6.67	7.37	10	800	10.3	58.3	BJ6.0A	BJ6.0CA
SMBJ6.5A	SMBJ6.5CA	6.5	7.22	7.98	10	500	11.2	53.6	BJ6.5A	BJ6.5CA
SMBJ7.0A	SMBJ7.0CA	7.0	7.78	8.60	10	200	12.0	50.0	BJ7.0A	BJ7.0CA
SMBJ7.5A	SMBJ7.5CA	7.5	8.33	9.21	1	100	12.9	46.6	BJ7.5A	BJ7.5CA
SMBJ8.0A	SMBJ8.0CA	8.0	8.89	9.83	1	50	13.6	44.2	BJ8.0A	BJ8.0CA
SMBJ8.5A	SMBJ8.5CA	8.5	9.44	10.40	1	20	14.4	41.7	BJ8.5A	BJ8.5CA
SMBJ9.0A	SMBJ9.0CA	9.0	10.00	11.10	1	10	15.4	39.0	BJ9.0A	BJ9.0CA
SMBJ10A	SMBJ10CA	10.0	11.10	12.30	1	5	17.0	35.3	BJ10A	BJ10CA
SMBJ11A	SMBJ11CA	11.0	12.20	13.50	1	5	18.2	33.0	BJ11A	BJ11CA
SMBJ12A	SMBJ12CA	12.0	13.30	14.70	1	1	19.9	30.2	BJ12A	BJ12CA
SMBJ13A	SMBJ13CA	13.0	14.40	15.90	1	1	21.5	28.0	BJ13A	BJ13CA
SMBJ14A	SMBJ14CA	14.0	15.60	17.20	1	1	23.2	25.9	BJ14A	BJ14CA
SMBJ15A	SMBJ15CA	15.0	16.70	18.50	1	1	24.4	24.6	BJ15A	BJ15CA
SMBJ16A	SMBJ16CA	16.0	17.80	19.70	1	1	26.0	23.1	BJ16A	BJ16CA
SMBJ17A	SMBJ17CA	17.0	18.90	20.90	1	1	27.6	21.8	BJ17A	BJ17CA
SMBJ18A	SMBJ18CA	18.0	20.00	22.10	1	1	29.2	20.6	BJ18A	BJ18CA
SMBJ20A	SMBJ20CA	20.0	22.20	24.50	1	1	32.4	18.6	BJ20A	BJ20CA
SMBJ22A	SMBJ22CA	22.0	24.40	26.90	1	1	35.5	16.9	BJ22A	BJ22CA
SMBJ24A	SMBJ24CA	24.0	26.70	29.50	1	1	38.9	15.5	BJ24A	BJ24CA
SMBJ26A	SMBJ26CA	26.0	28.90	31.90	1	1	42.1	14.3	BJ26A	BJ26CA
SMBJ28A	SMBJ28CA	28.0	31.10	34.40	1	1	45.4	13.3	BJ28A	BJ28CA
SMBJ30A	SMBJ30CA	30.0	33.30	36.80	1	1	48.4	12.4	BJ30A	BJ30CA
SMBJ33A	SMBJ33CA	33.0	36.70	40.60	1	1	53.3	11.3	BJ33A	BJ33CA
SMBJ36A	SMBJ36CA	36.0	40.00	44.20	1	1	58.1	10.4	BJ36A	BJ36CA
SMBJ40A	SMBJ40CA	40.0	44.40	49.10	1	1	64.5	9.3	BJ40A	BJ40CA
SMBJ43A	SMBJ43CA	43.0	47.80	52.80	1	1	69.4	8.7	BJ43A	BJ43CA
SMBJ45A	SMBJ45CA	45.0	50.00	55.30	1	1	72.7	8.3	BJ45A	BJ45CA
SMBJ48A	SMBJ48CA	48.0	53.30	58.90	1	1	77.4	7.8	BJ48A	BJ48CA
SMBJ51A	SMBJ51CA	51.0	56.70	62.70	1	1	82.4	7.3	BJ51A	BJ51CA
SMBJ54A	SMBJ54CA	54.0	60.00	66.30	1	1	87.1	6.9	BJ54A	BJ54CA
SMBJ58A	SMBJ58CA	58.0	64.40	71.20	1	1	93.6	6.5	BJ58A	BJ58CA
SMBJ60A	SMBJ60CA	60.0	66.70	73.70	1	1	96.8	6.2	BJ60A	BJ60CA
SMBJ64A	SMBJ64CA	64.0	71.10	78.60	1	1	103.0	5.9	BJ64A	BJ64CA
SMBJ70A	SMBJ70CA	70.0	77.80	86.00	1	1	113.0	5.3	BJ70A	BJ70CA
SMBJ75A	SMBJ75CA	75.0	83.20	92.10	1	1	121.0	5.0	BJ75A	BJ75CA
SMBJ78A	SMBJ78CA	78.0	86.70	95.80	1	1	126.0	4.8	BJ78A	BJ78CA
SMBJ85A	SMBJ85CA	85.0	94.40	104.00	1	1	137.0	4.4	BJ85A	BJ85CA
SMBJ90A	SMBJ90CA	90.0	100.00	111.00	1	1	146.0	4.1	BJ90A	BJ90CA
SMBJ100A	SMBJ100CA	100.0	111.00	123.00	1	1	162.0	3.7	BJ100A	BJ100CA
SMBJ110A	SMBJ110CA	110.0	122.00	135.00	1	1	177.0	3.4	BJ110A	BJ110CA
SMBJ120A	SMBJ120CA	120.0	133.00	147.00	1	1	193.0	3.1	BJ120A	BJ120CA
SMBJ130A	SMBJ130CA	130.0	144.00	159.00	1	1	209.0	2.9	BJ130A	BJ130CA
SMBJ150A	SMBJ150CA	150.0	167.00	185.00	1	1	243.0	2.5	BJ150A	BJ150CA
SMBJ160A	SMBJ160CA	160.0	178.00	197.00	1	1	259.0	2.3	BJ160A	BJ160CA
SMBJ170A	SMBJ170CA	170.0	189.00	209.00	1	1	275.0	2.2	BJ170A	BJ170CA
SMBJ180A	SMBJ180CA	180.0	201.00	222.00	1	1	292.0	2.1	BJ180A	BJ180CA
SMBJ190A	SMBJ190CA	190.0	211.00	233.00	1	1	308.0	2.0	BJ190A	BJ190CA
SMBJ200A	SMBJ200CA	200.0	224.00	247.00	1	1	324.0	1.9	BJ200A	BJ200CA
SMBJ210A	SMBJ210CA	210.0	237.00	263.00	1	1	340.0	1.8	BJ210A	BJ210CA
SMBJ220A	SMBJ220CA	220.0	246.00	272.00	1	1	356.0	1.7	BJ220A	BJ220CA
SMBJ250A	SMBJ250CA	250.0	279.00	309.00	1	1	405.0	1.5	BJ250A	BJ250CA
SMBJ300A	SMBJ300CA	300.0	335.00	371.00	1	1	486.0	1.3	BJ300A	BJ300CA
SMBJ350A	SMBJ350CA	350.0	391.00	435.00	1	1	567.0	1.1	BJ350A	BJ350CA
SMBJ400A	SMBJ400CA	400.0	447.00	494.00	1	1	648.0	0.9	BJ400A	BJ400CA
SMBJ440A	SMBJ440CA	440.0	492.00	543.00	1	1	713.0	0.9	BJ440A	BJ440CA