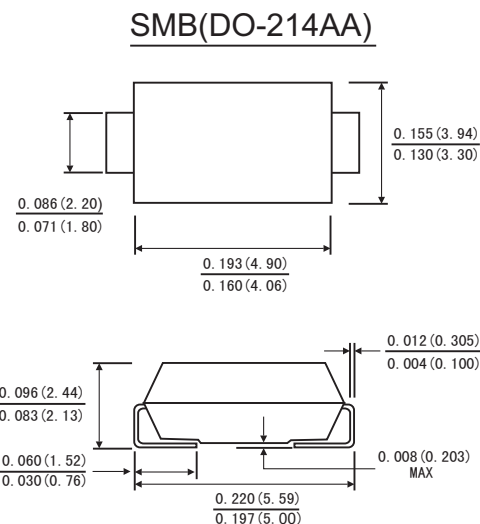


FEATURES

- 600 Watts Pulse capability
- Excellent clamping capability
- Low incremental surge resistance
- Fast response time
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

MECHANICAL DATA

- Case: JEDEC SMB(DO-214AA) molded plastic body
- Terminals: Solder Plated
- Polarity: By cathode band denotes uni-directional device, none cathode band denotes bi-directional device.



Dimensions in inches and (millimeters)

DEVICES FOR BIDIRECTIONAL APPLICATIONS

1. For bi-directional use C suffix for Types .
2. Electrical characteristics apply in both directions.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified)

	Symbols	Value	Units
Peak Pulse Power Dissipation at on 10/1000μs Waveform (Note 1.2)	P _{PK}	600	Watts
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method) (Note 2,3)	I _{FSM}	100	Amps
Operating junction and storage temperature range	T _J , T _{STG}	-55 to 150	°C

Note: 1. Non repetitive current pulse and derated above T_A=25°C

2. Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum

RATINGS AND CHARACTERISTIC CURVES(P6SMB SERIES)

Part number		Reverse Standoff Voltage VRWM (Volts)	Breakdown Voltage VBR (Volts)		Test Current (mA)	Maximum Clamping Voltage VC@Ipp (Volts)	Maximum Peak Pulse Current Ipp(A)	Maximum Reverse Leakage IR@VRWM (μA)
UNI	BI		MIN	MAX				
P6SMB6.8A	P6SMB6.8CA	5.80	6.45	7.14	10.0	10.5	57.0	3σ 值
P6SMB7.5A	P6SMB7.5CA	6.40	7.13	7.88	10.0	11.3	53.0	3σ 值
P6SMB8.2A	P6SMB8.2CA	7.02	7.79	8.61	10.0	12.1	50.0	3σ 值
P6SMB9.1A	P6SMB9.1CA	7.78	8.65	9.55	1.0	13.4	45.0	3σ 值
P6SMB10A	P6SMB10CA	8.55	9.50	10.50	1.0	14.5	41.0	3σ 值
P6SMB11A	P6SMB11CA	9.87	10.50	11.60	1.0	15.6	38.0	1.0
P6SMB12A	P6SMB12CA	10.71	11.40	12.60	1.0	16.7	36.0	1.0
P6SMB13A	P6SMB13CA	11.66	12.40	13.70	1.0	18.2	33.0	1.0
P6SMB15A	P6SMB15CA	13.44	14.30	15.80	1.0	21.2	28.0	1.0
P6SMB16A	P6SMB16CA	14.28	15.20	16.80	1.0	22.5	27.0	1.0
P6SMB18A	P6SMB18CA	16.07	17.10	18.90	1.0	25.2	24.0	1.0
P6SMB20A	P6SMB20CA	17.96	19.00	21.00	1.0	27.7	22.0	1.0
P6SMB22A	P6SMB22CA	19.74	20.90	23.10	1.0	30.6	20.0	1.0
P6SMB24A	P6SMB24CA	21.53	22.80	25.20	1.0	33.2	18.0	1.0
P6SMB27A	P6SMB27CA	24.26	25.70	28.40	1.0	37.5	16.0	1.0
P6SMB30A	P6SMB30CA	26.88	28.50	31.50	1.0	41.4	14.4	1.0
P6SMB33A	P6SMB33CA	29.61	31.40	34.70	1.0	45.7	13.2	1.0
P6SMB36A	P6SMB36CA	32.34	34.20	37.80	1.0	49.9	12.0	1.0
P6SMB39A	P6SMB39CA	34.97	37.10	41.00	1.0	53.9	11.2	1.0
P6SMB43A	P6SMB43CA	38.64	40.90	45.20	1.0	59.3	10.1	1.0
P6SMB47A	P6SMB47CA	42.21	44.70	49.40	1.0	64.8	9.3	1.0
P6SMB51A	P6SMB51CA	45.78	48.50	53.60	1.0	70.1	8.6	1.0
P6SMB56A	P6SMB56CA	50.19	53.2	58.8	1.0	77.0	7.80	1.0
P6SMB62A	P6SMB62CA	55.65	58.9	65.1	1.0	85.0	7.10	1.0
P6SMB68A	P6SMB68CA	61.01	64.6	71.4	1.0	92.0	6.50	1.0
P6SMB75A	P6SMB75CA	67.31	71.3	78.8	1.0	103.0	5.80	1.0
P6SMB82A	P6SMB82CA	73.61	77.9	86.1	1.0	113.0	5.30	1.0
P6SMB91A	P6SMB91CA	81.69	86.5	95.5	1.0	125.0	4.80	1.0
P6SMB100A	P6SMB100CA	89.78	95.0	105.0	1.0	137.0	4.40	1.0
P6SMB110A	P6SMB110CA	98.70	105.0	116.0	1.0	152.0	4.00	1.0
P6SMB120A	P6SMB120CA	107.10	114.0	126.0	1.0	165.0	3.60	1.0
P6SMB130A	P6SMB130CA	116.55	124.0	137.0	1.0	179.0	3.30	1.0
P6SMB150A	P6SMB150CA	134.40	143.0	158.0	1.0	207.0	2.90	1.0
P6SMB160A	P6SMB160CA	142.80	152.0	168.0	1.0	219.0	2.70	1.0
P6SMB170A	P6SMB170CA	152.25	162.0	179.0	1.0	234.0	2.60	1.0

RATINGS AND CHARACTERISTIC CURVES (P6SMB SERIES)

P6SMB180A	P6SMB180CA	161.70	171.0	189.0	1.0	246.0	2.40	1.0
P6SMB200A	P6SMB200CA	179.55	190.0	210.0	1.0	274.0	2.20	1.0
P6SMB220A	P6SMB220CA	194.25	209.0	231.0	1.0	328.0	1.83	1.0
P6SMB250A	P6SMB250CA	224.70	237.0	263.0	1.0	344.0	1.75	1.0
P6SMB300A	P6SMB300CA	268.80	285.0	315.0	1.0	414.0	1.45	1.0
P6SMB350A	P6SMB350CA	315.00	332.0	368.0	1.0	482.0	1.25	1.0
P6SMB400A	P6SMB400CA	359.10	380.0	420.0	1.0	548.0	1.10	1.0
P6SMB440A	P6SMB440CA	394.80	418.0	462.0	1.0	602.0	1.00	1.0
P6SMB500A	P6SMB500CA	427.50	475.0	525.0	1.0	690.0	0.87	5.0
P6SMB510A	P6SMB510CA	434.00	485.0	535.0	1.0	698.0	0.86	5.0
P6SMB520A	P6SMB520CA	444.60	494.0	546.0	1.0	717.6	0.84	5.0
P6SMB550A	P6SMB550CA	470.30	522.5	577.5	1.0	759.0	0.79	5.0
P6SMB600A	P6SMB600CA	513.0	570.0	630.0	1.0	828.0	0.72	5.0

For Bi-directional type having VRWM of 10 Volts and less, the IR limit is double

- 1.A transient suppressor is normally selected according to the working peak reverse voltage (VRWM), which should be equal to or greater than the DC or continuous peak operating voltage level.
- 2.VBR measured at pulse test current IT at an ambient temperature of 25°C.
- 3.Surge current waveform per Figure 2 and derate per Figure 3

RATINGS AND CHARACTERISTIC CURVES (P6SMB SERIES)

FIG. 1-PEAK PULSE POWER CURVE

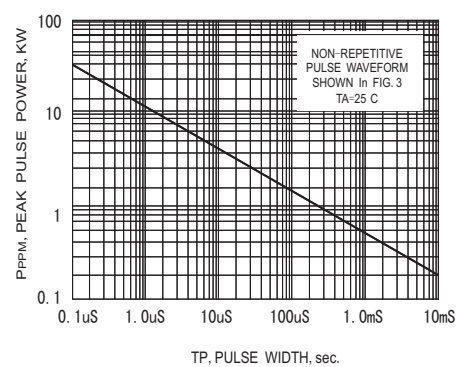


FIG. 2-PULSE DERATING CURVE

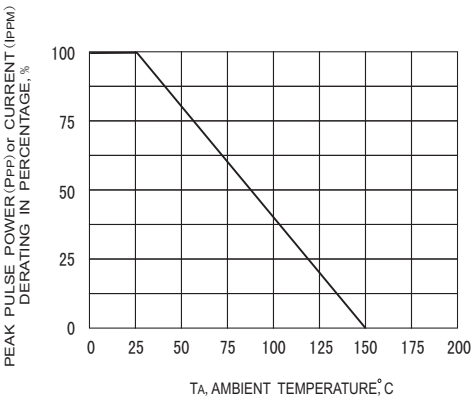


FIG. 3-PULSE WAVEFORM

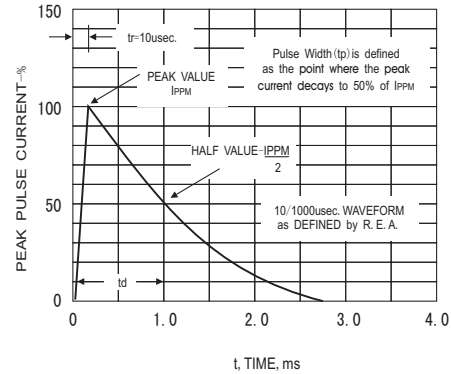


FIG. 4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

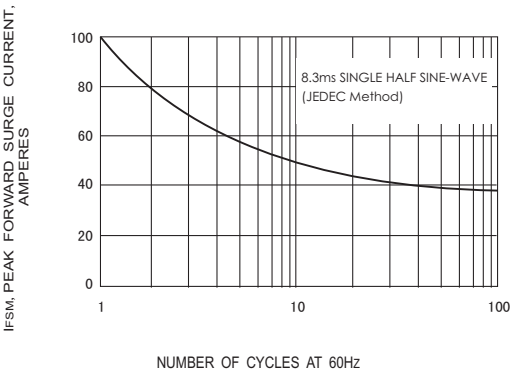


FIG. 5-Steady State Power Derating Curve

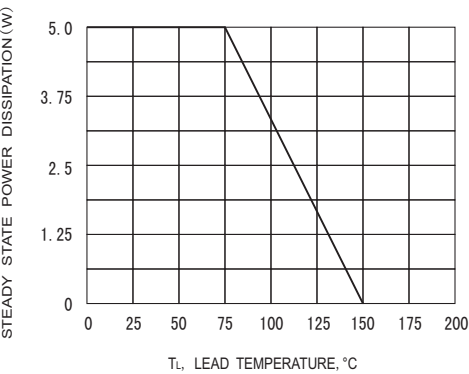


FIG. 6-TYPICAL JUNCTION CAPACITANCE

