

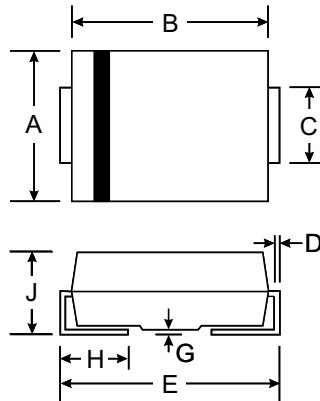
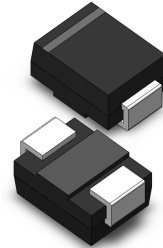
**VOLTAGE RANGE: 5.0 - 40V**  
**POWER: 800Watts**

### Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- Available in uni-directional and bi-directional
- Excellent clamping capability
- Very fast response time
- Low incremental surge resistance

### Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)



SMB(DO-214AA)		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

### Maximum Ratings @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak pulse power dissipation with a 10/1000 μs	P <sub>PPM</sub>	800	W
Peak pulse current with a 10/1000 μs waveform <sup>(1)</sup>	I <sub>PPM</sub>	See next table	A
Peak forward surge current 8.3 ms single half sine-wave uni-directional only <sup>(2)</sup>	I <sub>FSM</sub>	100	A
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150	°C

(1) Non-repetitive current pulse, per Fig. 3 and derated above T<sub>A</sub> = 25 °C per Fig. 2

(2) Mounted on 0.2 x 0.2" (5.0 x 5.0 mm) copper pads to each terminal



TYPE		Breakdown Voltage Min. @I <sub>T</sub>	Breakdown Voltage Max. @ I <sub>T</sub>	Test Current	Reverse Stand-Off Voltage	Reverse Leakage @V <sub>RWM</sub>	Peak Pulse Current	Maximum Clamping Voltage @I <sub>PP</sub>
(Uni)	(Bi)	V <sub>BR MIN</sub> (V)	V <sub>BR MAX</sub> (V)	I <sub>T</sub> (mA)	V <sub>RWM</sub> (V)	I <sub>R</sub> (μA)	I <sub>PP</sub> (A)	V <sub>C</sub> (V)
SMB8J5.0	SMB8J5.0C	6.40	7.82	10	5.0	2000	83.3	9.6
SMB8J5.0A	SMB8J5.0CA	6.40	7.25	10	5.0	2000	87.0	9.2
SMB8J6.0	SMB8J6.0C	6.67	8.15	10	6.0	2000	70.2	11.4
SMB8J6.0A	SMB8J6.0CA	6.67	7.37	10	6.0	2000	77.7	10.3
SMB8J6.5	SMB8J6.5C	7.22	8.82	10	6.5	1000	65.0	12.3
SMB8J6.5A	SMB8J6.5CA	7.22	7.98	10	6.5	1000	71.4	11.2
SMB8J7.0	SMB8J7.0C	7.78	9.51	10	7.0	400	60.2	13.3
SMB8J7.0A	SMB8J7.0CA	7.78	8.60	10	7.0	400	66.7	12.0
SMB8J7.5	SMB8J7.5C	8.33	10.2	1.0	7.5	200	55.9	14.3
SMB8J7.5A	SMB8J7.5CA	8.33	9.21	1.0	7.5	200	62.0	12.9
SMB8J8.0	SMB8J8.0C	8.89	10.9	1.0	8.0	100	53.3	15.0
SMB8J8.0A	SMB8J8.0CA	8.89	9.83	1.0	8.0	100	58.8	13.6
SMB8J8.5	SMB8J8.5C	9.44	11.5	1.0	8.5	40	50.3	15.9
SMB8J8.5A	SMB8J8.5CA	9.44	10.4	1.0	8.5	40	55.6	14.4
SMB8J9.0	SMB8J9.0C	10.0	12.2	1.0	9.0	20	47.3	16.9
SMB8J9.0A	SMB8J9.0CA	10.0	11.1	1.0	9.0	20	51.9	15.4
SMB8J10	SMB8J10C	11.1	13.6	1.0	10	10	42.6	18.8
SMB8J10A	SMB8J10CA	11.1	12.3	1.0	10	10	47.1	17.0
SMB8J11	SMB8J11C	12.2	14.9	1.0	11	5.0	39.8	20.1
SMB8J11A	SMB8J11CA	12.2	13.5	1.0	11	5.0	44.0	18.2
SMB8J12	SMB8J12C	13.3	16.3	1.0	12	5.0	36.4	22.0
SMB8J12A	SMB8J12CA	13.3	14.7	1.0	12	5.0	40.2	19.9
SMB8J13	SMB8J13C	14.4	17.6	1.0	13	1.0	33.6	23.8
SMB8J13A	SMB8J13CA	14.4	15.9	1.0	13	1.0	37.2	21.5
SMB8J14	SMB8J14C	15.6	19.1	1.0	14	1.0	31.0	25.8
SMB8J14A	SMB8J14CA	15.6	17.2	1.0	14	1.0	34.5	23.2
SMB8J15	SMB8J15C	16.7	20.4	1.0	15	1.0	29.7	26.9
SMB8J15A	SMB8J15CA	16.7	18.5	1.0	15	1.0	32.8	24.4
SMB8J16	SMB8J16C	17.8	21.8	1.0	16	1.0	27.8	28.8
SMB8J16A	SMB8J16CA	17.8	19.7	1.0	16	1.0	30.8	26.0
SMB8J17	SMB8J17C	18.9	23.1	1.0	17	1.0	26.2	30.5
SMB8J17A	SMB8J17CA	18.9	20.9	1.0	17	1.0	29.0	27.6
SMB8J18	SMB8J18C	20.0	24.4	1.0	18	1.0	24.8	32.2
SMB8J18A	SMB8J18CA	20.0	22.1	1.0	18	1.0	27.4	29.2
SMB8J20	SMB8J20C	22.2	27.1	1.0	20	1.0	22.3	35.8
SMB8J20A	SMB8J20CA	22.2	24.5	1.0	20	1.0	24.7	32.4
SMB8J22	SMB8J22C	24.4	29.8	1.0	22	1.0	20.3	39.4
SMB8J22A	SMB8J22CA	24.4	26.9	1.0	22	1.0	22.5	35.5
SMB8J24	SMB8J24C	26.7	32.6	1.0	24	1.0	18.6	43.0
SMB8J24A	SMB8J24CA	26.7	29.5	1.0	24	1.0	20.6	38.9
SMB8J26	SMB8J26C	28.9	35.3	1.0	26	1.0	17.2	46.6
SMB8J26A	SMB8J26CA	28.9	31.9	1.0	26	1.0	19.0	42.1
SMB8J28	SMB8J28C	31.1	38.0	1.0	28	1.0	16.0	50.0
SMB8J28A	SMB8J28CA	31.1	34.4	1.0	28	1.0	17.6	45.4
SMB8J30	SMB8J30C	33.3	40.7	1.0	30	1.0	15.0	53.5
SMB8J30A	SMB8J30CA	33.3	36.8	1.0	30	1.0	16.5	48.4
SMB8J33	SMB8J33C	36.7	44.9	1.0	33	1.0	13.6	59.0
SMB8J33A	SMB8J33CA	36.7	40.6	1.0	33	1.0	15.0	53.3
SMB8J36	SMB8J36C	40.0	48.9	1.0	36	1.0	12.4	64.3
SMB8J36A	SMB8J36CA	40.0	44.2	1.0	36	1.0	13.8	58.1
SMB8J40	SMB8J40C	44.4	54.3	1.0	40	1.0	11.2	71.4
SMB8J40A	SMB8J40CA	44.4	49.1	1.0	40	1.0	12.4	64.5

**Notes:**

- (1) Pulse test:  $t_p \leq 50$  ms
- (2) Surge current waveform per Fig. 3 and derate per Fig. 2
- (3) All terms and symbols are consistent with ANSI/IEEE C62.35