



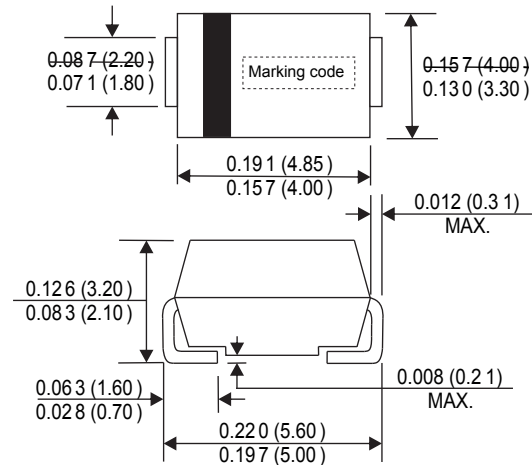
### ■ Features

- Electrostatic discharge (ESD) test under IEC6100-4-2 standard >16KV(SS32BL~SS36BL). standard >10KV(SS310BL~SS320BL).
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction. Suffix
  - Lead-free parts meet environmental standards of MIL-STD-19500 /228

### ■ Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AA / SMB
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : 0.003 ounce, 0.091 gram

SMB(DO-214AA)



Dimensions in inches and (millimeters)

### ■ Maximum ratings and electrical characteristics

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

Type Number	Symbol	SS 32BL	SS 34BL	SS 36BL	SS 310BL	SS 315BL	SS 320BL	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	40	60	100	150	200	V
Maxium RMS Voltage	V <sub>RMS</sub>	14	28	42	70	105	140	V
Maxium DC Blocking Voltage	V <sub>DC</sub>	20	40	60	100	150	200	V
Average Rectified Output Current (Note 1) @T <sub>L</sub> =100°C	I <sub>F(AV)</sub>	3.0						A
Peak forward surge current:8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	80						A
Forward Voltage @I <sub>F</sub> =2.0A	V <sub>FM</sub>	0.45	0.55	0.75	0.85		V	
Peak Reverse Current @T <sub>A</sub> =25°C	I <sub>R</sub>	0.5						mA
At Rated DC Blocking Voltage @T <sub>A</sub> =100°C	I <sub>R</sub>	20						mA
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	250						pF
Typical Thermal Resistance Junction to Ambient(Note 1)	R <sub>θJA</sub>	55						°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150				-55 to +175		°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +175						°C

Note: 1.Leads maintained at ambient temperature at a distance of 9.5mm from the case.

2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

mensions in inches and (millimeters)

■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

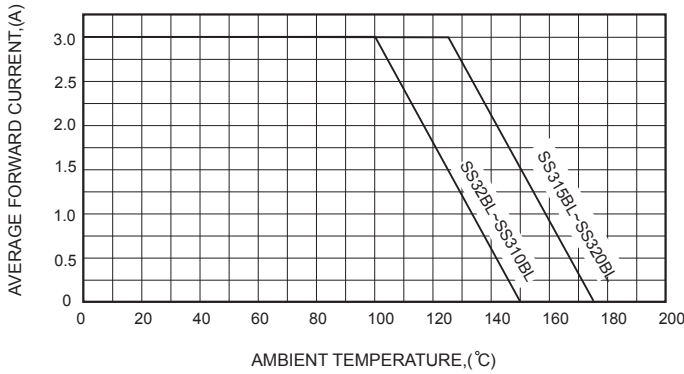


FIG.2-TYPICAL FORWARD CHARACTERISTICS

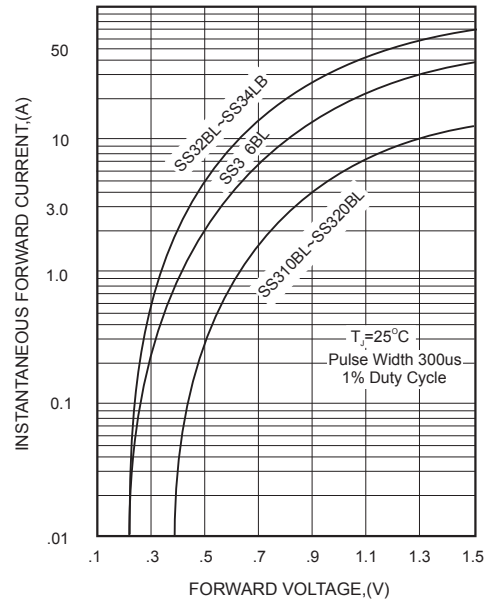


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

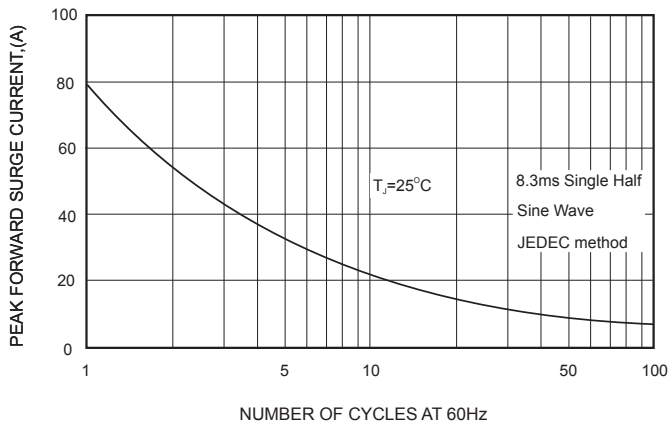


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

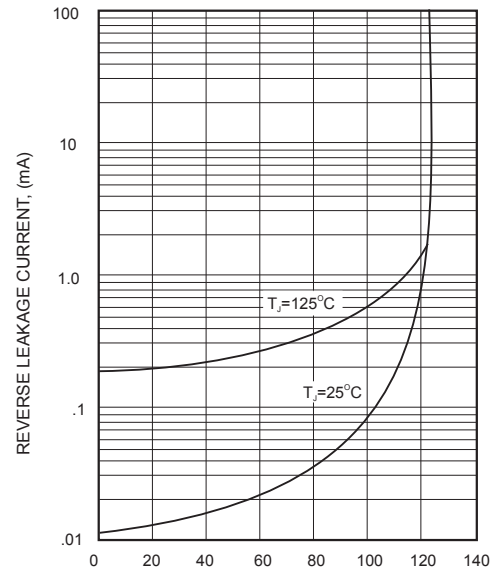
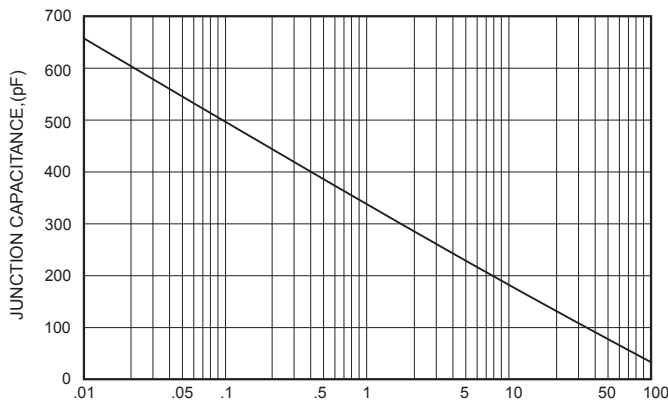
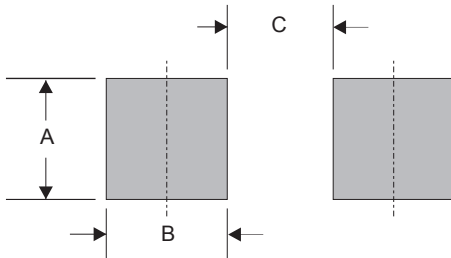


FIG.4-TYPICAL JUNCTION CAPACITANCE



■ SMB foot print



A	B	C
0.091 (2.30)	0.098 (2.50)	0.071 (1.80)

Dimensions in inches and (millimeters)

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMB	3000/REEL	48000	36X35.8X36.5	12.00	11.00