



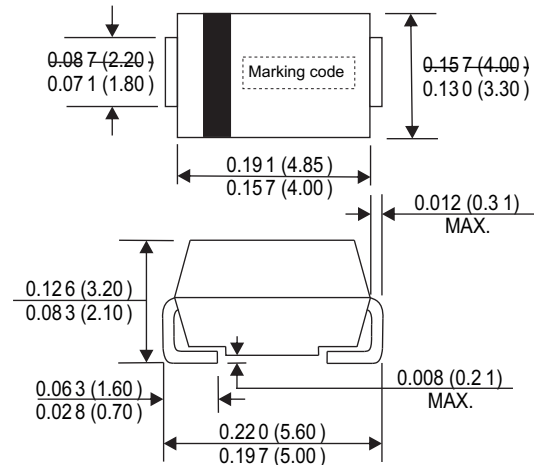
■ Features

- Electrostatic discharge (ESD) test under IEC6100-4-2 standard >16KV
- 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.
- 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%.

	Symbol	MBRS130	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	V
Maxium RMS Voltage	V_{RMS}	21	V
Maxium DC Blocking Voltage	V_{DC}	30	V
Average Rectified Output Current (Note 1) @ $T_L=100^{\circ}C$	$I_{F(AV)}$	1.0	A
Peak forward surge current:8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	40	A
Forward Voltage @ $I_F=1.0A$	V_{FM}	0.45	V
Peak Reverse Current @ $T_A=25^{\circ}C$	I_R	0.5	mA
At Rated DC Blocking Voltage @ $T_A=100^{\circ}C$	I_R	20	mA
Typical Junction Capacitance (Note 2)	C_J	120	pF
Typical Thermal Resistance Junction toAmbient(Note 1)	$R_{\theta JA}$	25	$^{\circ}C/W$
Operating Temperature Range	T_J	-55 to +150	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

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

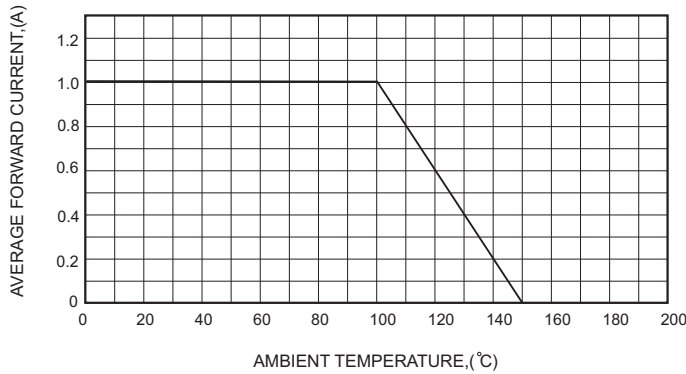


FIG.2-TYPICAL FORWARD CHARACTERISTICS

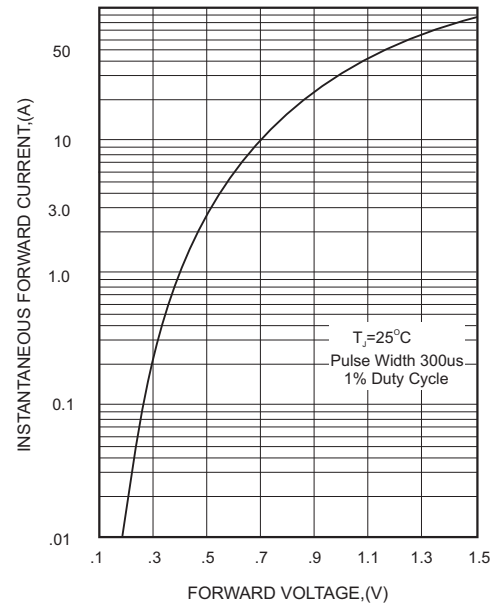


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

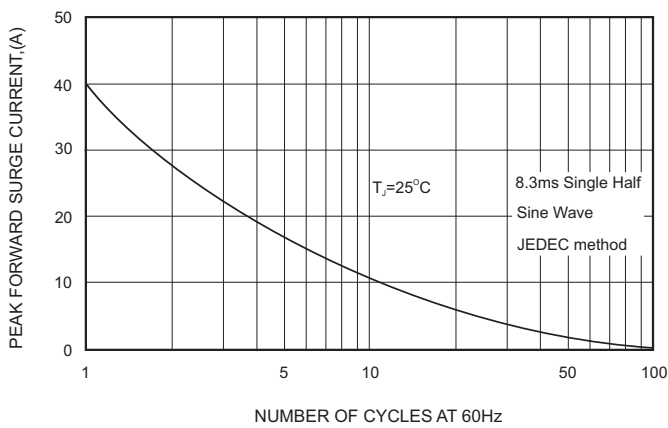


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

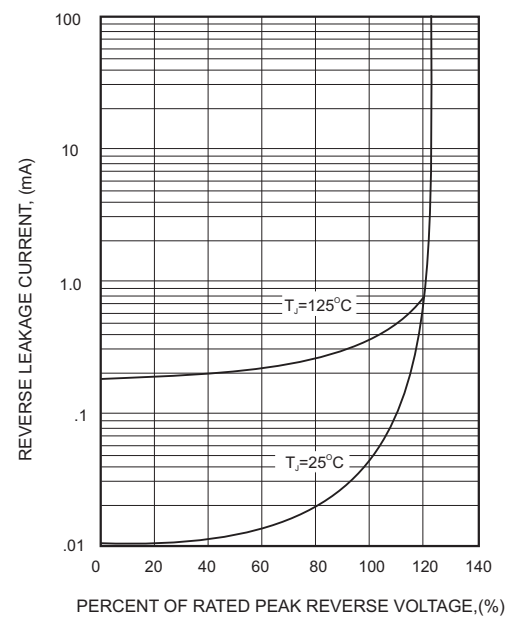
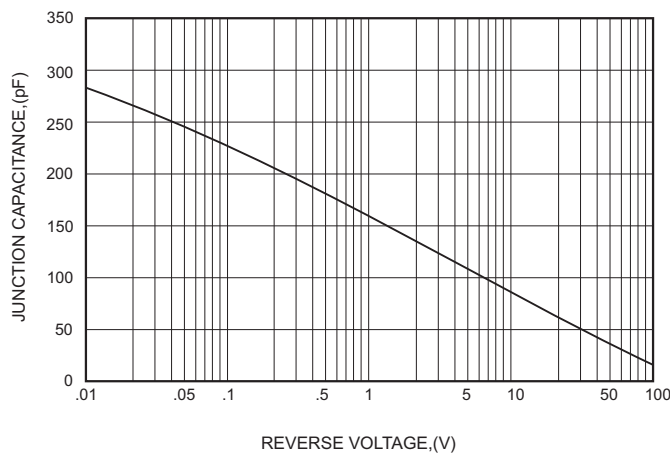
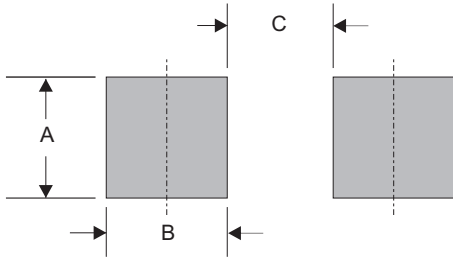


FIG.4-TYPICAL JUNCTION CAPACITANCE



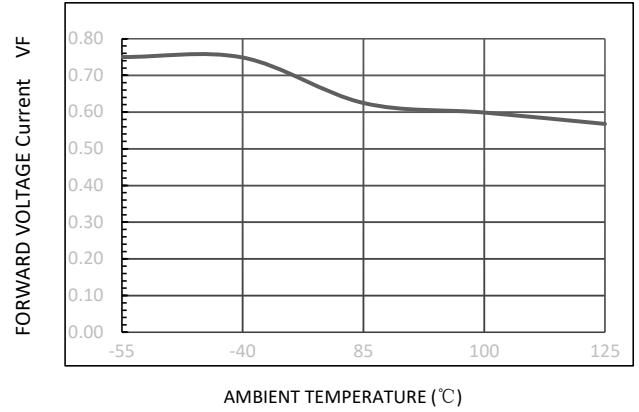
■ SMB foot print



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

Dimensions in inches and (millimeters)

FIG.6 SS110BL VF VS . AMBIENT TEMPERATURE



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