



**REVERSE VOLTAGE: 20 - 200 V**  
**FORWARD CURRENT: 1.0 A**

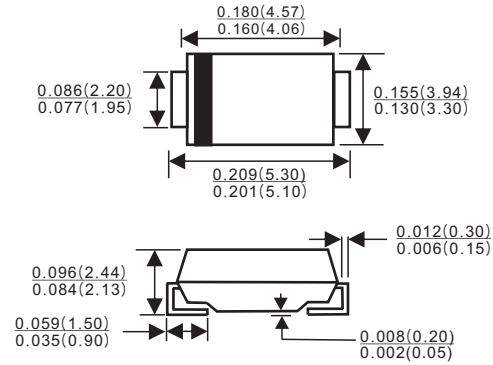
### Features

- ◇ Schottky barrier rectifier
- ◇ Guardring protection
- ◇ Low forward voltage
- ◇ Reverse energy tested
- ◇ High current capability
- ◇ Extremely low thermal resistance

### Mechanical Data

- ◇ Case: SMB molded plastic body
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting position: ANY
- ◇ Weight: 0.003 ounces, 0.093 gram

### SMB/DO-214AA



Dimensions in inches and(millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

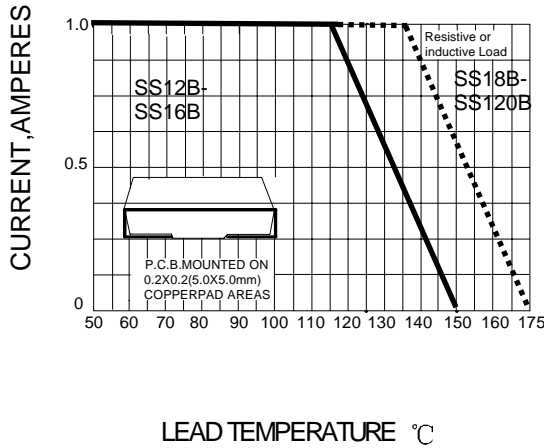
Parameter		SS12B	SS13B	SS14B	SS15B	SS16B	SS18B	SS19B	SS110B	SS115B	SS120B	UNITS
Marking code		SS12	SS13	SS14	SS15	SS16	SS18	SS19	SS110	SS115	SS120	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	90	100	150	200	V
Maximum RMS voltage	$V_{RWS}$	14	21	28	35	42	56	63	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	90	100	115	200	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	1.0										A
Peak forward surge current 8.3ms single half-sine-wave	$I_{FSM}$	40										A
Maximum instantaneous forward voltage at $I_{FM}=1.0A$ (NOTE1)	$V_F$	0.55			0.75		0.85					V
Maximum DC reverse current $T_J=25^\circ\text{C}$ at rated DC blocking voltage $T_J=125^\circ\text{C}$	$I_R$	0.2					0.5					m A
Maximum thermal resistance	$R_{\theta JL}$	28										$^\circ\text{C/W}$
Operating temperature range	$T_J$	-55 ---- +150					-55 ---- +175					$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 ---- +150					-55 ---- +175					$^\circ\text{C}$

NOTE: 1.Pulse test: Pulse width 300us,duty cycle 1 %

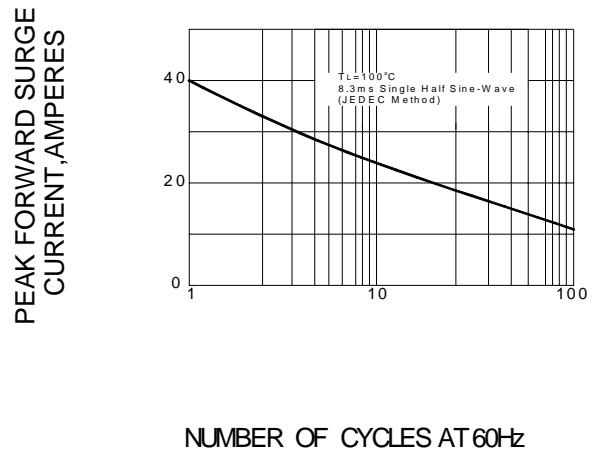


## Ratings AND Characteristic Curves

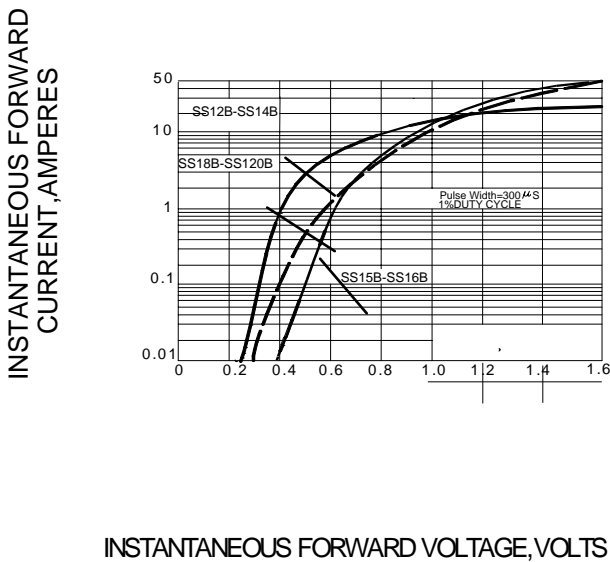
**FIG.1 – FORWARD DERATING CURVE**



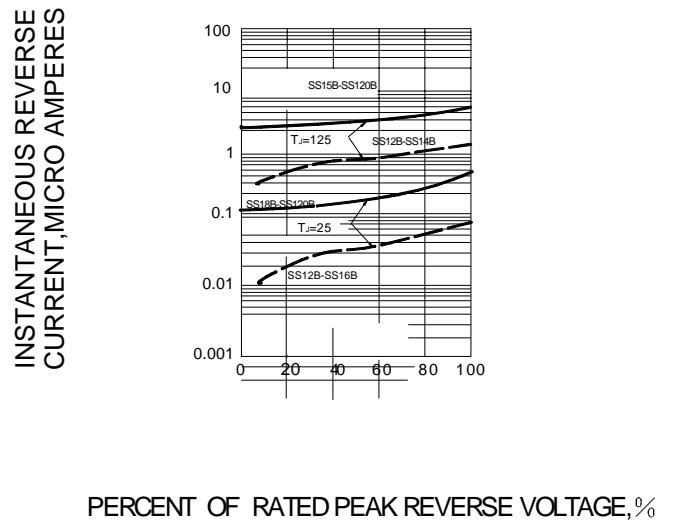
**FIG.2– PEAK FORWARD SURGE CURRENT**



**FIG.3 – TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**



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