WEITRON

S3AB thru S3MB

General Purpose Rectifiers
Surface Mount Device

Lead(Pb)-Free

REVERSE VOLTAGE
50 TO 1000 VOLTS
FORWARD CURRENT
3.0 AMPERE



SMB(DO-214AA)

Features:

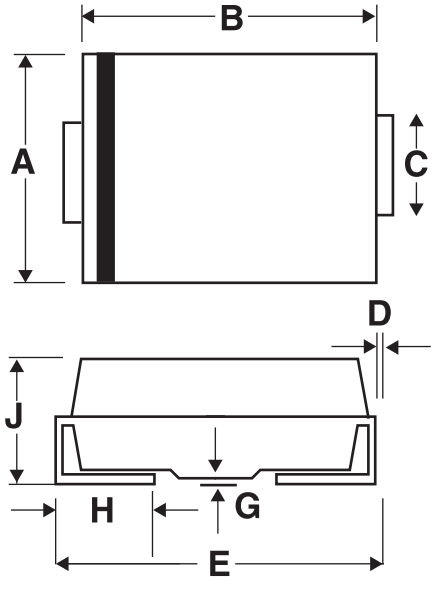
* High current capability
* High surge current capability
* Low reverse current
* Component in accordance to RoHS 2002/95/EC

Mechanical Data

* Case: SMB (DO-214AA)
* Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
* Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
* Polarity: Cathode Band
* Weight: 0.095 grams (approximate)

SMB Outline Dimensions

Unit:mm



SMB		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.80
C	1.96	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

Maximum Ratings and Electrical Characteristics

Rating 25°C Ambient Temperature Unless Otherwise Specified.

Characteristics	Symbol	S3AB	S3BB	S3DB	S3GB	S3JB	S3KB	S3MB	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	IF	3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	IFSM	100.0							A
Maximum Instantaneous IF=3A @ 25°C	VF	1.15							V
Maximum DC Reverse Current @TA=25°C At Rated DC Blocking Voltage @TA=100°C	IR	10.0 500.0							uA
Typical Junction Capacitance	C_J	60							P_F
Typical Thermal Resistance	$R_{\theta JA}$	20							°C/W
Operating Temperature Range	T_J	-55 to+150							°C
Storage Temperature Range	TSTG	-55 to+150							°C

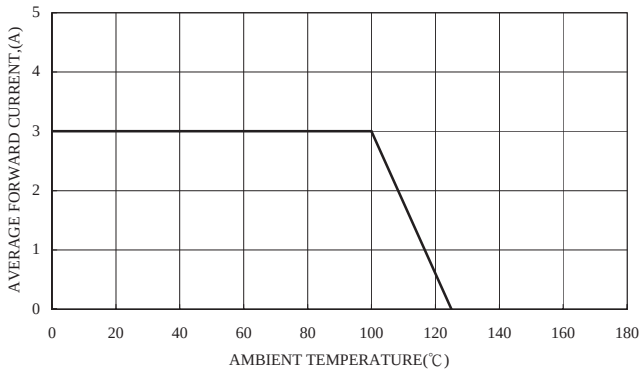


FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

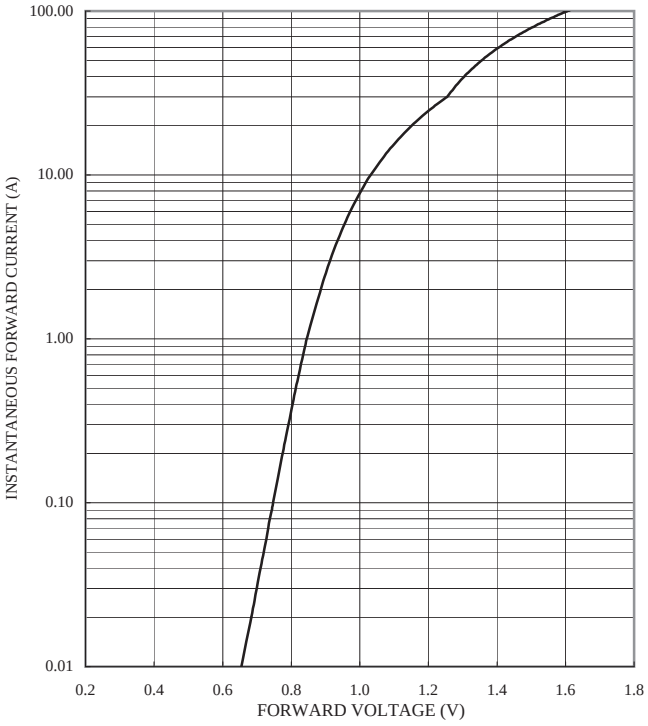


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

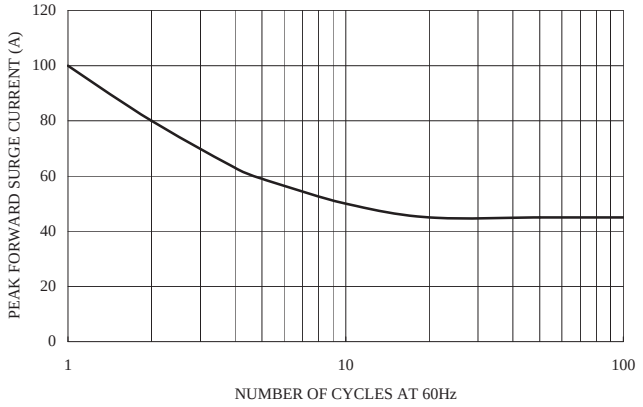


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

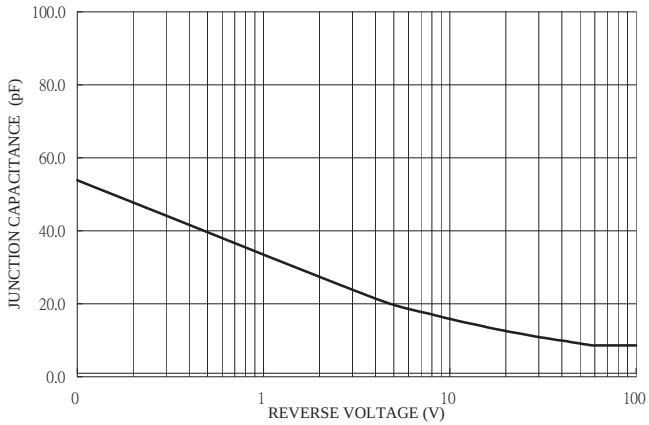


FIG. 4-TYPICAL JUNCTION CAPACITANCE

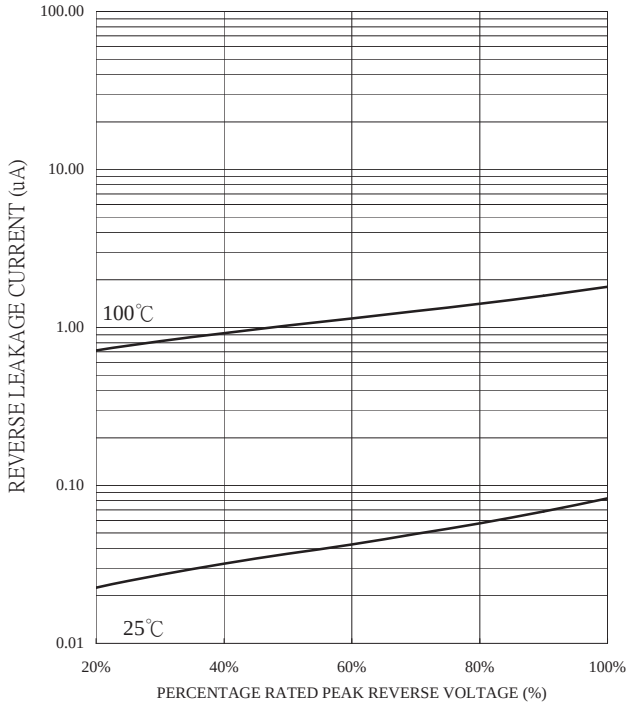


FIG. 5-TYPICAL REVERSE CHARACTERISTICS