WEITRON

B120B thru B160B

Surface Mount Schottky Barrier Rectifiers

Lead(Pb)-Free

REVERSE VOLTAGE
20 TO 60 VOLTS
FORWARD CURRENT
1.0 AMPERE

Feature:

*For Surface Mount Application
*Metal-Semiconductor Junction With Guardring
*Epitaxial Construction
*Very Low Forward Voltage Drop
*High Current Capability
*Plastic Meterial Has UL Flammability Classification 94V-0
*For Use In Low , And Polarity Protection Applications



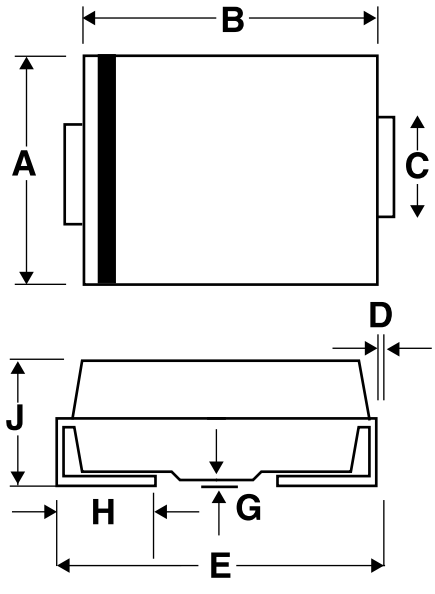
SMB(DO-214AA)

Mechanical Data

*Case : Molded Plastic
*Polarity :Indicated by cathode band
*Weight : 0.003 Ounce ,0.093 grams

SMB Outline Dimension

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.
Single Phase Half Wave, 60Hz , Resistive or Inductive Load.
For Capacitive Load, Derate Current by 20%.

Characteristics	Symbol	B120B	B130B	B140B	B150B	B160B	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	V
Maximum RMS Voltage	VRMS	14	21	28	35	42	V
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	V
Maximum Average Forward Rectified Current @TC=100°C	IF(AV)	1.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	30					A
Maximum Instantaneous At 1.0A DC	VF	0.5			0.7		V
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=100°C	IR	0.5 10					mA
Typical Junction Capacitance (Note 1)	CJ	110					PF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	20					°C/W
Operating Temperature Range	TJ	-55 to+125					°C
Storage Temperature Range	TSTG	-55 to+150					°C

NOTES:1.Measured at 1.0MHz applied reverse voltage of 4.0V DC.
2.Thermal Resistance Junction to case.

FIG.1 FORDWARD CURRENT DERATING CURVE

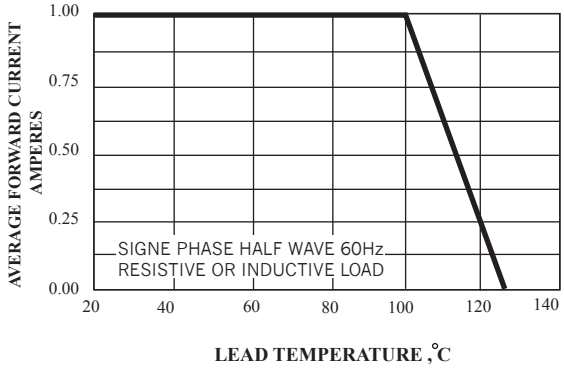


FIG.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

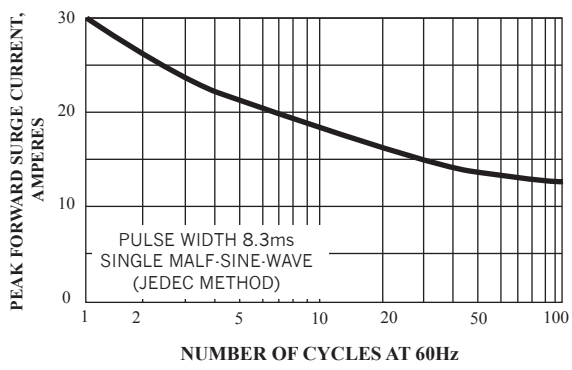


FIG.3 TYPICAL FORWARD CHARACTERISTICS

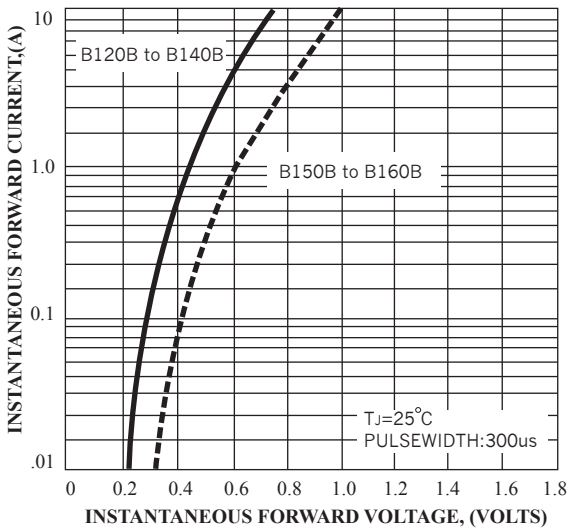


FIG.4 TYPICAL JUNCTION CAPACITANCE

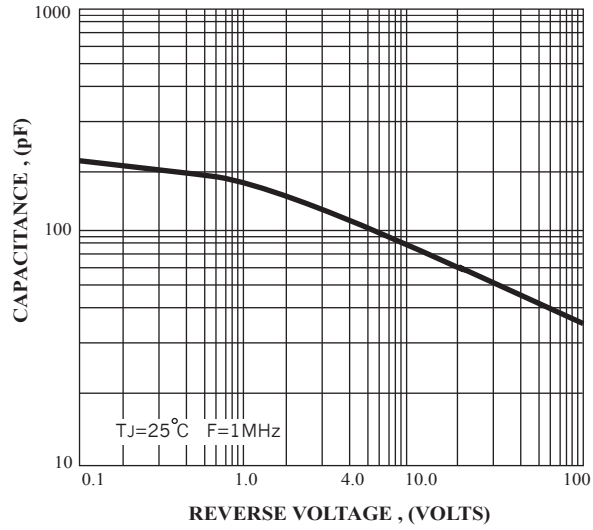


FIG.5 TYPICAL REVERSE CHARACTERISTICS

