

Low VF Surface Mount Schottky Barrier Rectifiers

Features:

- *Low Surface Mounted Applications
- *Metal-Semiconductor Junction with Guardring
- *Epitaxial Construction
- *Very Low Forward Voltage Drop
- *High Current Capability
- *Plastic Material Has UL Flammability Classification 94V-0
- *For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

Mechanical Data

- *Case : Molded Plastic
- *Polarity :Indicated By Cathode Band
- *Weight : 0.003 ounces, 0.093 grams

REVERSE VOLTAGE
40Volts

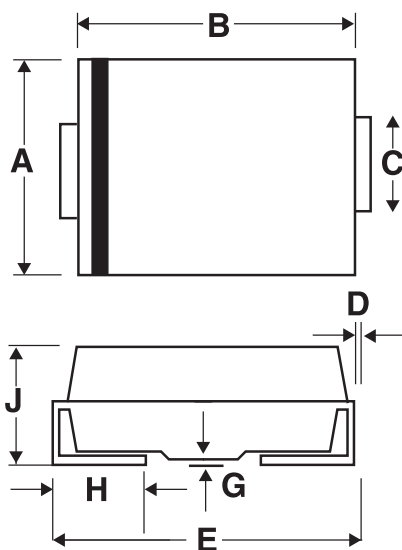
FORWARD CURRENT
1.0Ampere



SMB(DO-214AA)

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

Characteristics	Symbol	B140LB	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	40	V
Maximum RMS Voltage	VRMS	28	V
Maximum DC Blocking Voltage	VDC	40	V
Maximum Average Forward Rectified Current @TC=100°C	I _{F(AV)}	1.0	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	40	A
Maximum Instantaneous Forward Voltage @T _j =25°C @IF=1.0A @T _j =100°C	V _F	0.38 0.35	V
Maximum DC Reverse Current @T _j =25°C At Rated DC Blocking Voltage @T _j =100°C	I _R	1.0 25	mA
Typical Junction Capacitance (Note 1)	C _J	100	P _F
Typical Thermal Resistance (Note 2)	RA _{JC}	35	°C/W
Operating Temperature Range	T _J	-55 to+125	°C
Storage Temperature Range	T _{STG}	-55 to+150	°C

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

