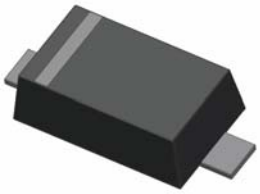
SEMICONDUCTOR

DATA SHEET

BAV19WSFL Thru BAV21WSFL

200mW SOD-323 SURFACE MOUNT
Small Outline Flat Lead Plastic Package
High Voltage Switching Diode



SOD-323 Flat Lead

Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
V_{RRM}	Maximum Repetitive Reverse Voltage	250	V
T_{STG}	Storage Temperature Range	-65 to +150	°C
T_J	Operating Junction Temperature	+150	°C
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Current Pulse Width = 1.0 Second Pulse Width = 1.0 µsecond	 1.0 4.0	 A A

These ratings are limiting values above which the serviceability of the diode may be impaired.

ELECTRICAL SYMBOL

Specification Features:

- Flat Lead SOD-323 Small Outline Plastic Package
- Surface Device Type Mounting
- Moisture Sensitivity Level 1
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

DEVICE MARKING CODE:

Device Type	Device Marking
BAV19WSFL	S5
BAV20WSFL	S6
BAV21WSFL	S7

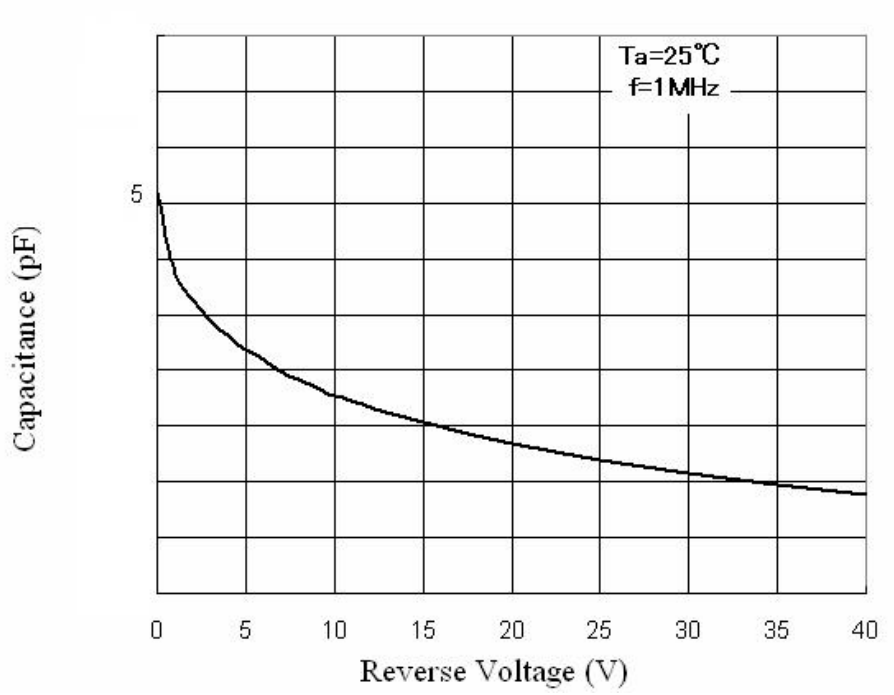
Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter		Test Condition	Limits		Unit
				Min	Max	
B_V	Breakdown Voltage	BAV19WSFL	I_R=100µA	120	---	Volts
		BAV20WSFL		200	---	Volts
		BAV21WSFL		250	---	Volts
I_R	Reverse Leakage Current	BAV19WSFL	V_R=100V	---	100	nA
		BAV20WSFL	V_R=150V	---	100	nA
		BAV21WSFL	V_R=200V	---	100	nA
V_F	Forward Voltage		I_F=100mA	---	1.0	Volts
			I_F=200mA	---	1.25	Volts
T_{RR}	Reverse Recovery Time		I_F=I_R=30mA R_L=100Ω I_{RR}=3mA	---	50	nS
C	Capacitance		V_R=0V, f=1M$_{HZ}$	---	5.0	pF

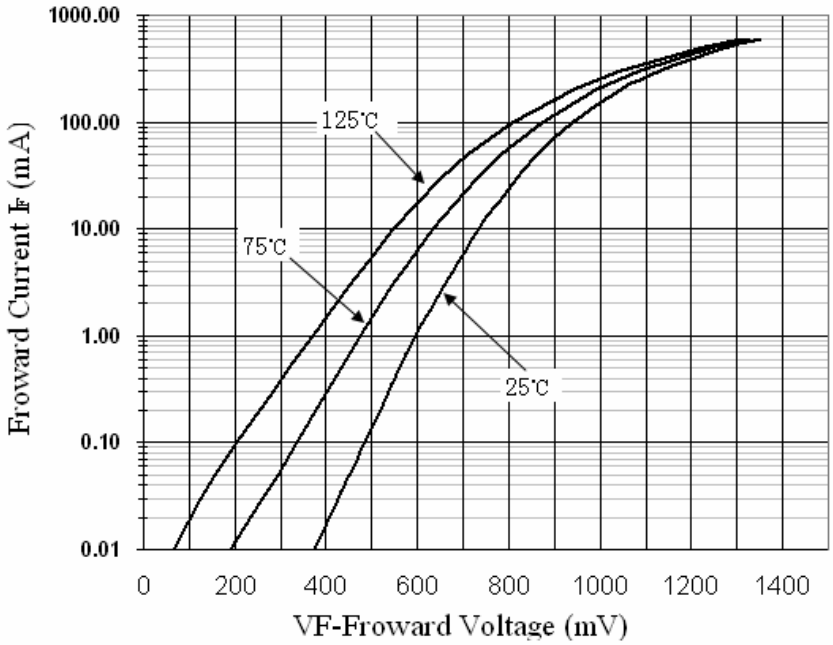
DEVICE CHARACTERISTICS

BAV19WSFL Thru BAV21WSFL

Total Capacitance



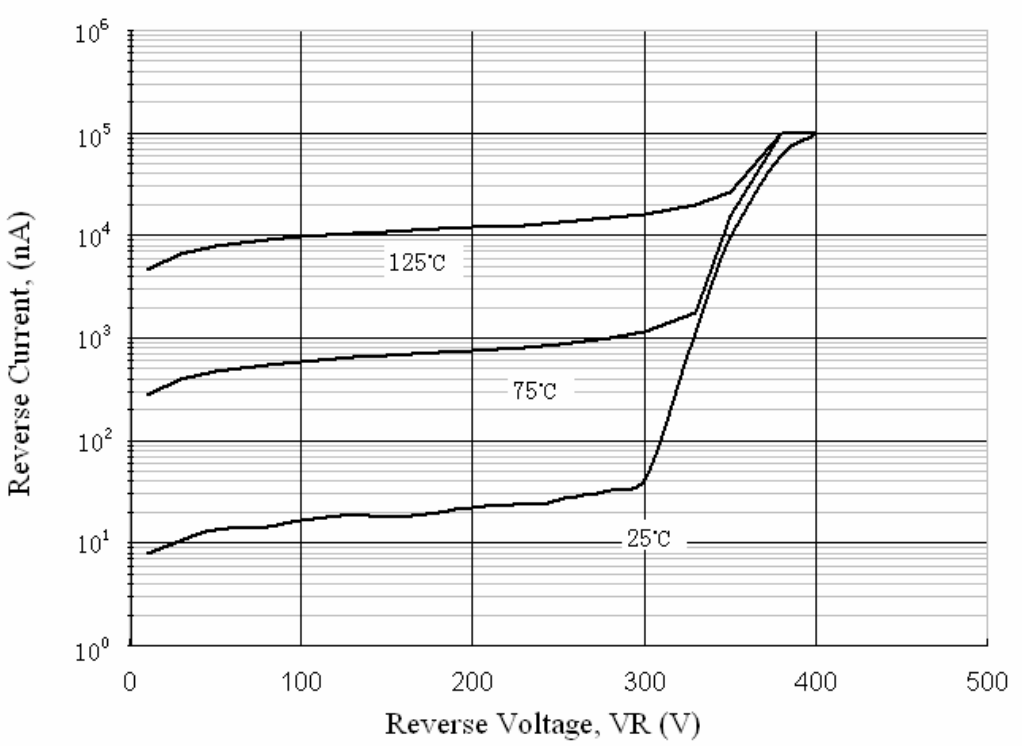
Forward Voltage vs Ambient Temperature



PACKAGE OUTLINE & DIMENSIONS

BAV19WSFL Thru BAV21WSFL

Reverse Current vs Reverse VoltageReverse



SOD-323 Package Outline