

SWITCHING DIODE

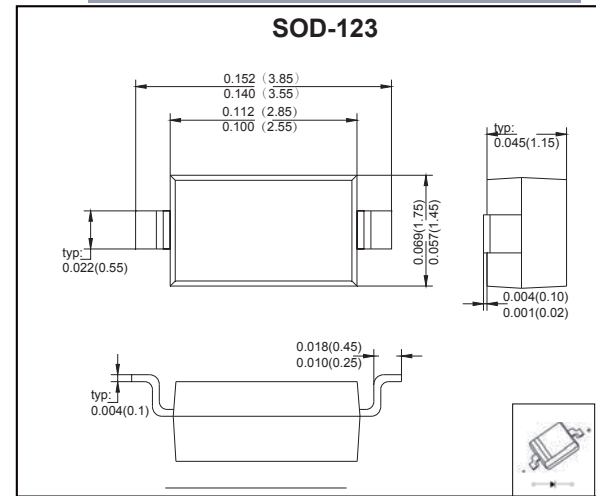
VOLTAGE RANGE: 120-250V
PEAK PULSE POWER: 500mW

FEATURES

- Low Reverse Current
- Surface Mount Package Ideally Suited for Automatic Insertion
- Fast Switching Speed
- For General Purpose Switching Applications

MECHANICAL DATA

- Case: SOD-123 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value			Unit
		BAV19W	BAV20W	BAV21W	
V_{RM}	Non-Repetitive Peak Reverse Voltage	120	200	250	V
V_{RRM}	Peak Repetitive Reverse Voltage	100	150	200	V
V_{RWM}	Working Peak Reverse Voltage				
$V_{R(RMS)}$	RMS Reverse Voltage	71	106	141	V
I_O	Average Rectified Output Current	200			mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ t=8.3ms	2.0			A
P_D	Power Dissipation	500			mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	250			°C/W
T_j	Junction Temperature	150			°C
T_{stg}	Storage Temperature	-55~+150			°C

Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

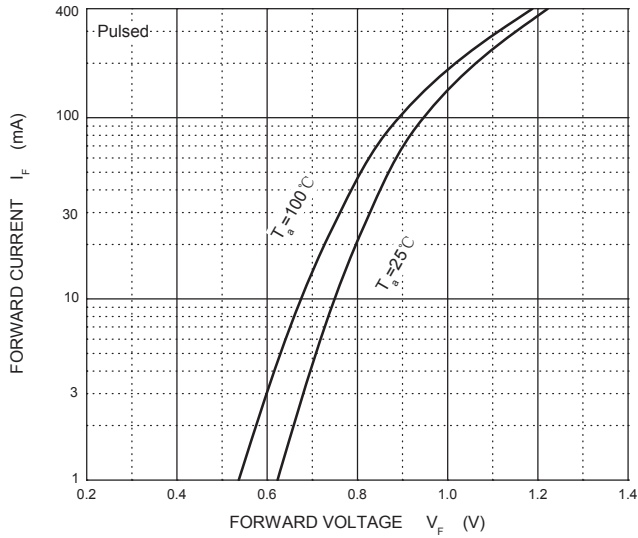
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse current	I_R	$V_R=100\text{V}$	BAV19W		0.1	μA
		$V_R=150\text{V}$	BAV20W		0.1	
		$V_R=200\text{V}$	BAV21W		0.1	
Forward voltage	V_F	$I_F=100\text{mA}$			1	V
		$I_F=200\text{mA}$			1.25	
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$			5	pF
Reverse recovery time	t_{rr}	$I_F=I_R=30\text{mA}, I_{rr}=0.1*I_R, R_L=100\Omega$			50	ns

MARKING:

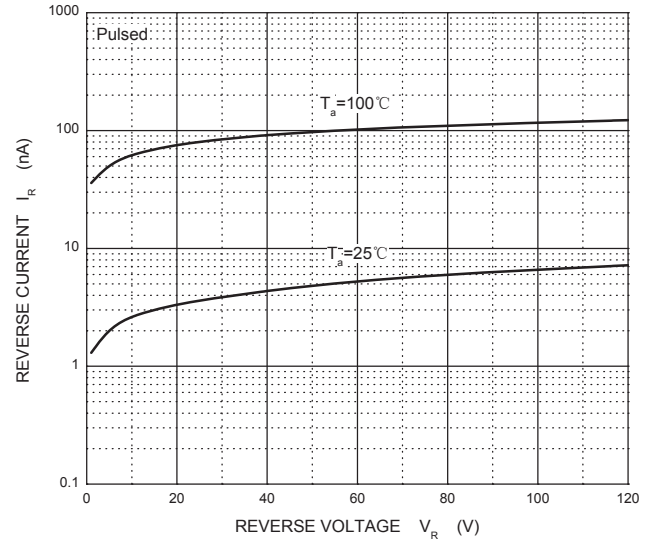
BAV19W	BAV20W	BAV21W
A8	T2	T3

RATINGS AND CHARACTERISTIC CURVES

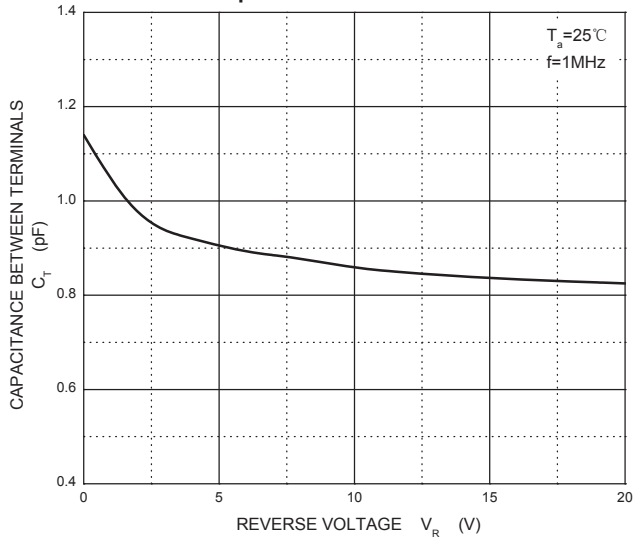
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

