

Switching Diodes

410mW SOD-123 AEC-Q101

BAV21W-A

MERITEK

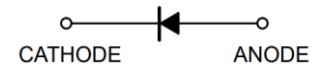
FEATURE

- Power Dissipation: 410mW
- 250V Peak Reverse Voltage
- 200mA Average Rectified Current
- Fast Switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance
- AEC-Q101 Qualified



MECHANICAL DATA

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD, Method 2026
- Polarity: Color Band Denotes Cathode End



MAXIMUM RATING



Parameter	Symbol	Value	Units
Reverse Voltage	V_R	200	V
Peak Reverse Voltage	V_{RM}	250	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and $f \geq 50\text{Hz}$	I_o	200	mA
Peak Forward Surge Current, 1ms	I_{FSM}	4.0	A
Power Dissipation Derate above 25°C	P_{TOT}	410	mW
Maximum Forward Voltage at 0.1A	V_F	1.0	V
Maximum Reverse Current at $V_R=200\text{V}$, $T_J=25^\circ\text{C}$	I_R	0.1	μA
Typical Junction Capacitance	C_J	5.0	pF
Maximum Reverse Recovery	T_{RR}	50	ns
Typical Thermal Resistance	$R_{\theta JA}$	450	$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~150	$^\circ\text{C}$

Note:

1. $T_A = 25^\circ\text{C}$ unless otherwise specified.
2. For capacitive load, derate current by 20%.
3. C_J at $V_R=0$, $f=1\text{MHz}$.
3. From $I_F=10\text{mA}$ to $I_R=1\text{mA}$, $V_R=6\text{V}$, $R_L=100\Omega$.

Switching Diodes

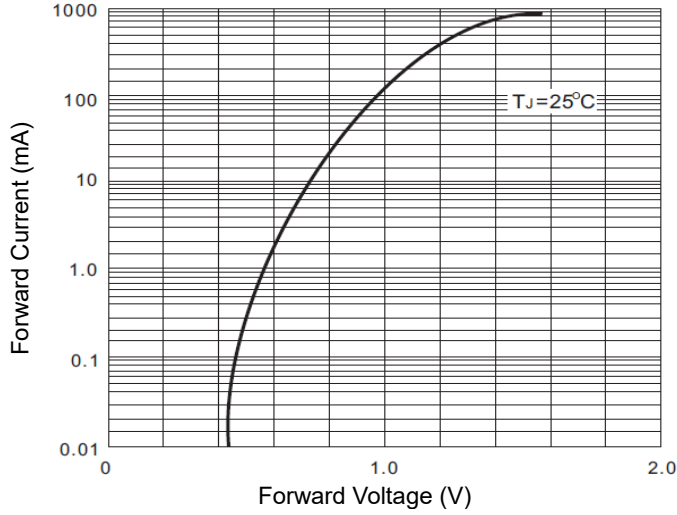
410mW SOD-123 AEC-Q101

BAV21W-A

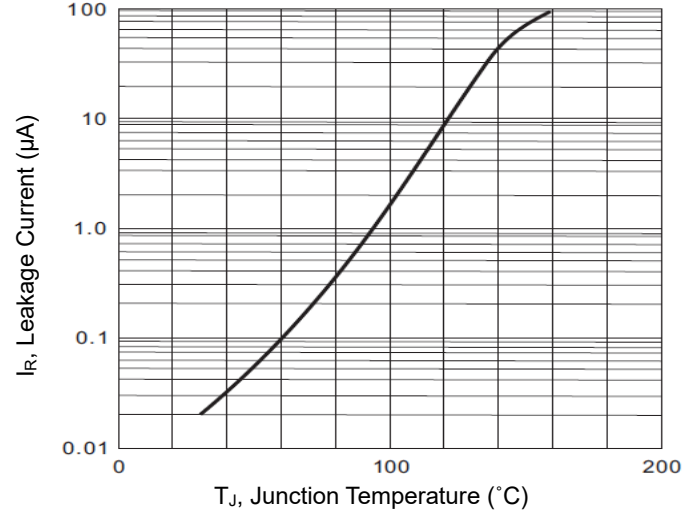
MERITEK

CHARACTERISTIC CURVES

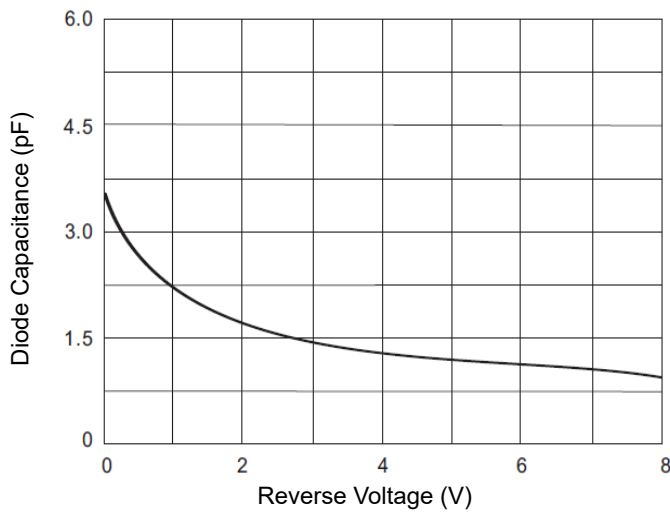
Typical Forward Characteristics



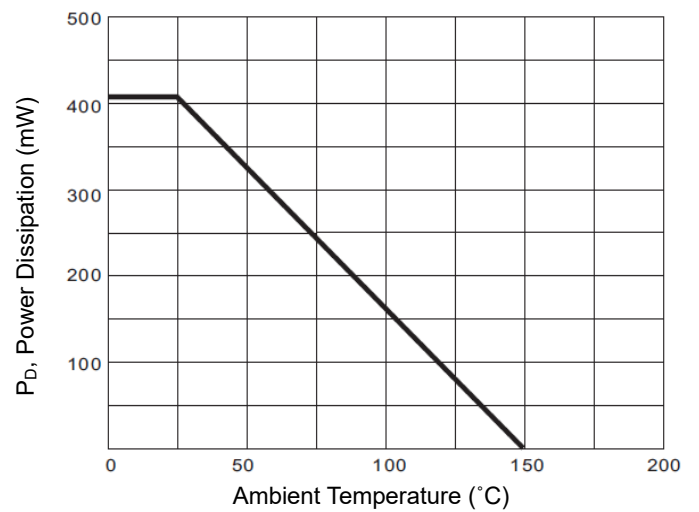
Leakage Current vs. Junction Temperature



Typical Junction Capacitance



Power Derating Curve



Switching Diodes

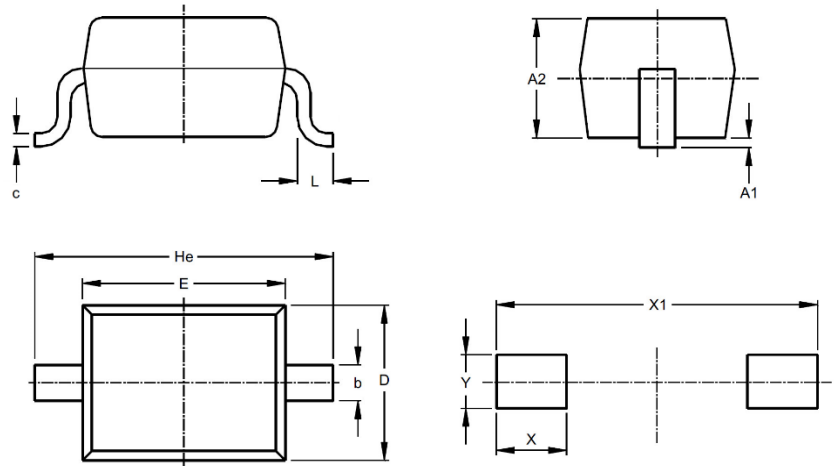
410mW SOD-123 AEC-Q101

BAV21W-A

MERITEK

DIMENSIONS

SOD-123	Min (mm)	Max (mm)
A1	-	0.12
A2	0.95	1.35
b	0.50	0.70
C	-	0.20
D	1.40	1.80
E	2.50	2.80
He	3.60	3.90
L	0.40	-
X	0.97	
X1	4.25	
Y	1.22	



*Specifications subject to change without notice.