

Switching Diodes

200mW SOD-323

BAS116WS

MERITEK

FEATURE

- Power Dissipation: 200mW
- 100V Peak Reverse Voltage
- 200mA Continuous Forward Current
- Low Leakage Current
- Low Capacitance



MECHANICAL DATA

- Case: SOD-323, 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	75	V
Peak Reverse Voltage	V_{RM}	100	V
Continuous Forward Current	I_F	0.2	A
Non-Repetitive Peak Forward Surge Current at $t=1\mu s$	I_{FSM}	4	A

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation	P_{TOT}	200	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	625	$^{\circ}C/W$
Junction Temperature	T_J	-55 to +150	$^{\circ}C$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$

Note: FR-5 Board = 1x0.75x0.062 inch.

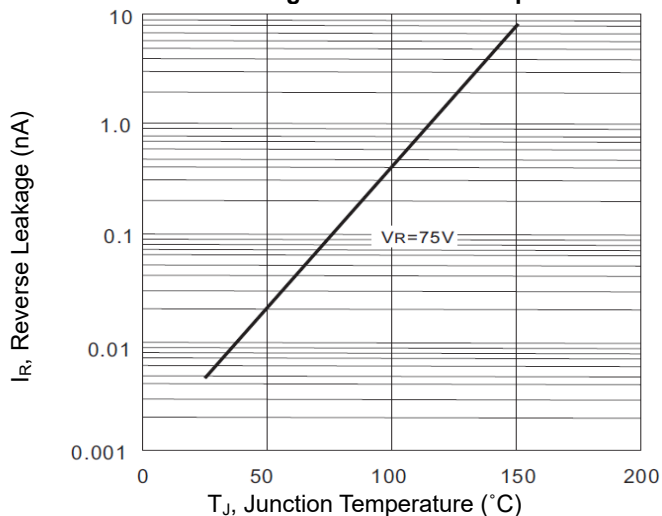
ELECTRICAL CHARACTERISTICS

Parameter	Test Condition	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage	$I_R=100\mu A$	$V_{(BR)}$	75	-	-	V
Reverse Current	$V_R=75V$	I_R	-	2	5	nA
	$V_R=75V, T_J=150^{\circ}C$		-	8	80	nA
Forward Voltage	$I_F=1mA$	V_F	-	-	0.90	V
	$I_F=10mA$		-	-	1.00	V
	$I_F=50mA$		-	-	1.10	V
	$I_F=150mA$		-	-	1.25	V
Total Capacitance	$V_R=0V, f=1MHz$	C_T	-	-	2	pF
Reverse Recovery Time	$I_F=I_R=10mA, R_L=100\Omega$	T_{RR}	-	-	3	μs

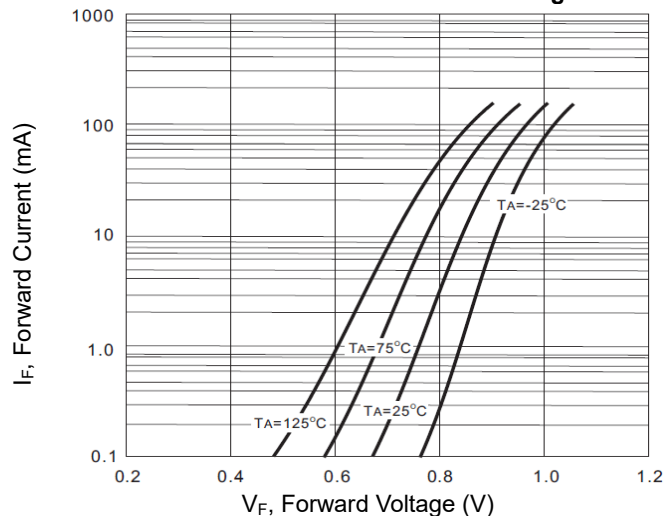
Note: $T_A = 25^{\circ}C$ unless otherwise specified.

CHARACTERISTIC CURVES

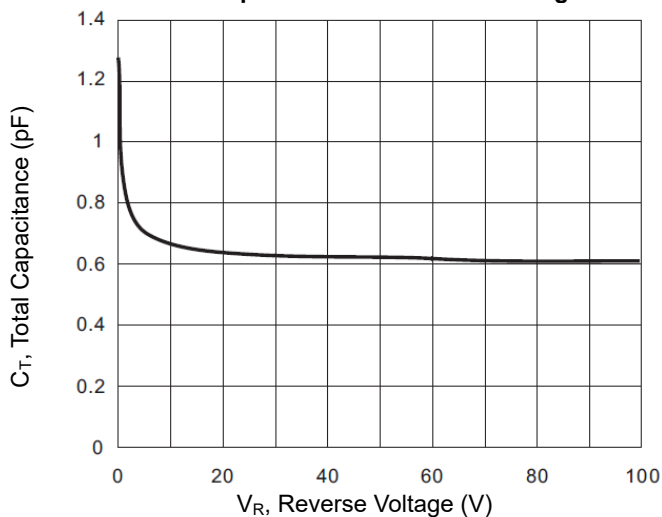
Reverse Leakage vs. Junction Temperature



Forward Current vs. Forward Voltage



Total Capacitance vs. Reverse Voltage



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DIMENSIONS

SOD-323	Min (mm)	Max (mm)
A	0.70	0.90
b	0.25	0.35
c	0.05	0.15
D	1.15	1.35
E	1.75	1.95
He	2.30	2.70
L2	0.30	-
G	1.44	
C	2.17	
X	0.73	
X1	2.90	
Y	0.50	

*Specifications subject to change without notice.

