

Features

- $V_R=120V/200V/250V$
- $I_{F(AV)}=200mA$
- Power Dissipation of 250mW
- Fast switching speed
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C

SOD-323

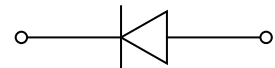


Applications

For use in low voltage high frequency circuit signals.

Mechanical Data

- Case: SOD-323
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end



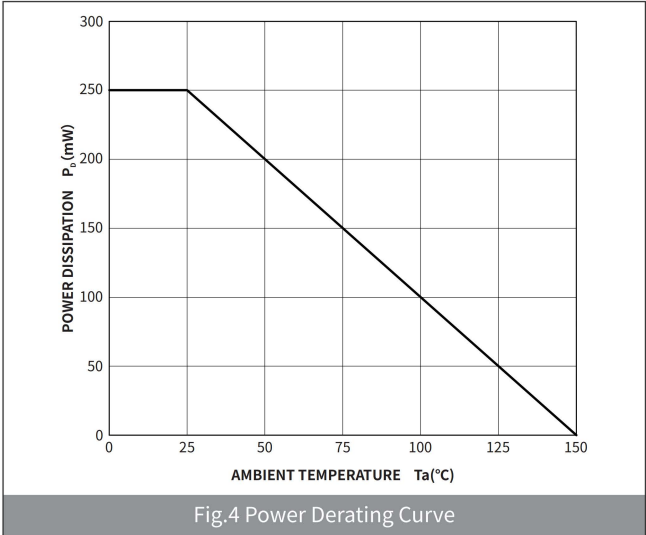
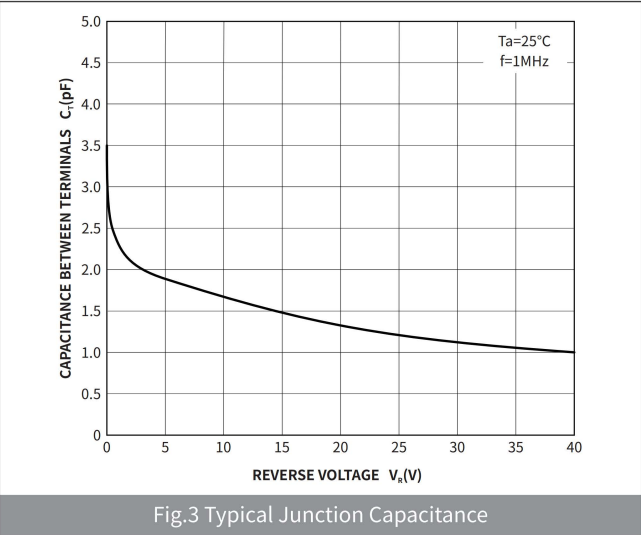
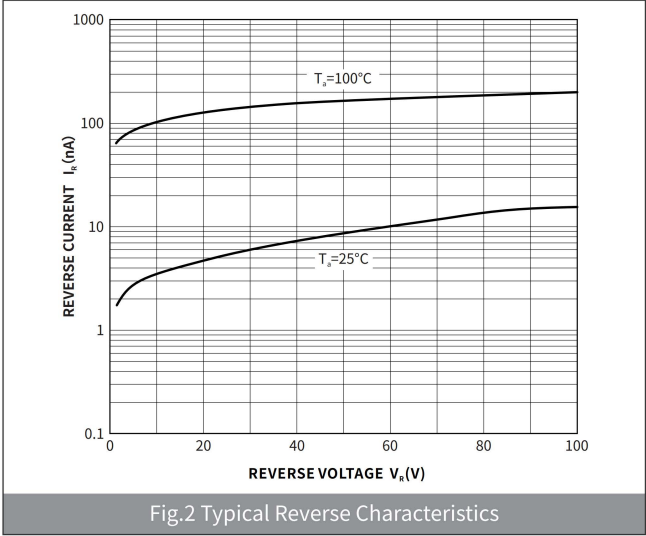
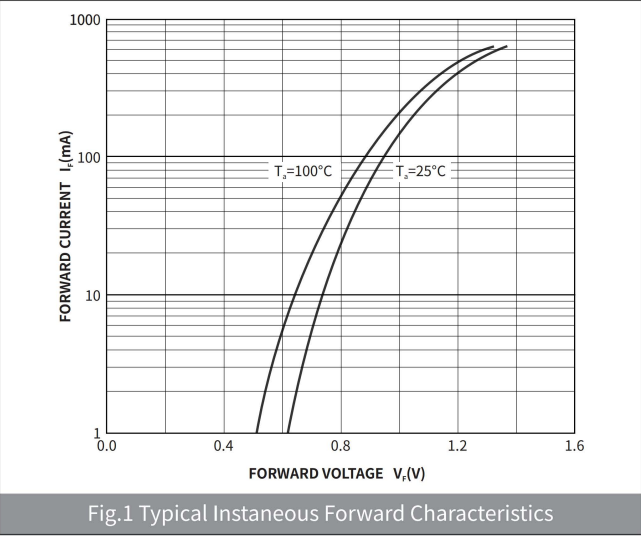
Maximum Ratings ($T_a=25^{\circ}C$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BAV19WS	BAV20WS	BAV21WS
Maximum repetitive peak reverse voltage	V_{RRM}	V	120	200	250
Maximum RMS Voltage	V_{RMS}	V	100	150	200
Reverse Breakdown voltage @ $I_R=100\mu A$	$V_{(BR)R}$	V	120	200	250
Maximum Average Forward Rectified Current	$I_{F(AV)}$	mA	200		
Repetitive peak forward current	I_{FRM}	mA	625		
Non-Repetitive Peak forward surge current @ $t_p=1.0\mu s$	I_{FSM}	A	2.5		
Non-Repetitive Peak forward surge current @ $t=1.0s$			0.5		
Power Dissipation	P_d	mW	250		
Storage temperature	T_{stg}	$^{\circ}C$	-55 ~ +150		
Junction temperature	T_j	$^{\circ}C$	-55 ~ +150		
Typical thermal resistance	$R_{\theta J-A}$	$^{\circ}C/W$	500		

Electrical Characteristics ($T_a=25^{\circ}C$ Unless otherwise specified)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	BAV19WS	BAV20WS	BAV21WS
Maximum instantaneous forward voltage	$I_F=100mA$	V_F	V	1.0		
	$I_F=200mA$			1.25		
Reverse Leakage Current	$V_R=V_{RMS}$	I_R	nA	100		
Total capacitance	$V_R=0V, f=1MHz$	C_T	pF	5.0		
Maximum reverse recovery time	$I_F=I_R=30mA, I_{rr}=0.1 \times I_{R2}, R_L=100\Omega$	T_{rr}	ns	50		

Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOD-323	R1	0.0048	3000	30000	120000	7"

Package Outline Dimensions (SOD-323)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.60	1.80	0.063	0.071
B	0.25	0.40	0.010	0.016
C	2.30	2.80	0.091	0.110
D	0.80	1.10	0.031	0.043
D ₁	0.80	0.90	0.031	0.035
E	1.20	1.40	0.047	0.055
F	0.08	0.18	0.003	0.007
L	0.475REF		0.019REF	
L ₁	0.25	0.40	0.010	0.016
H	-	0.14	-	0.006

Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	0.80	-	0.031	-
K	-	1.40	-	0.055
M	0.80	-	0.031	-