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SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

BAV316

Product specification


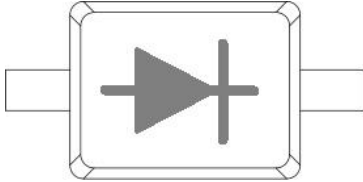

FEATURES

- Very Small Plastic Package
- High Switching Speed

APPLICATIONS

- High-Speed Switching in e.g. Surface Mounted Circuits

Reference News

PACKAGE OUTLINE	PIN CONFIGURATION	Marking
 SOD-323		

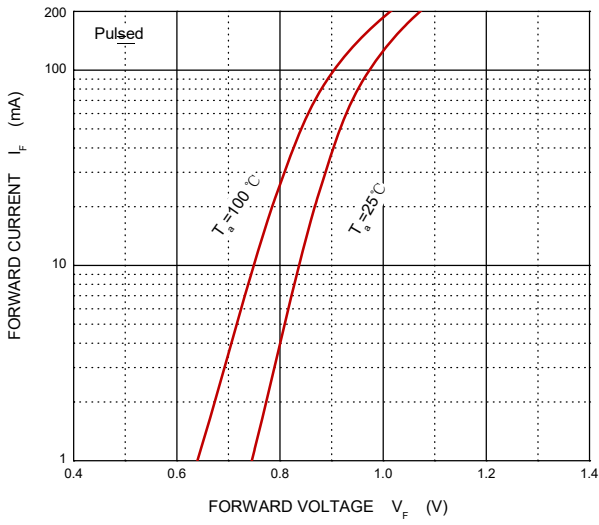
MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	130	V
V_R	DC Blocking Voltage	130	
I_o	Continuous Forward Current	215	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@t= 8.3ms	2.0	A
P_D	Power Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	°C/W
T_J, T_{stg}	Operation Junction an Storage Temperature Range	-55~+150	°C

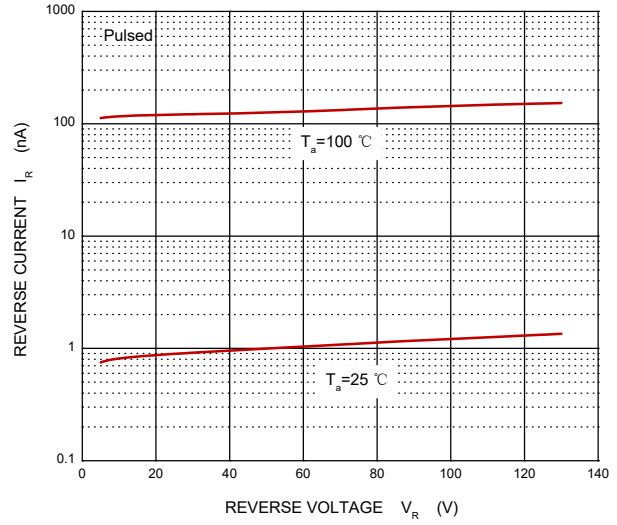
ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	130				$I_R=100\mu A$
Forward voltage	V_{F1}			0.85	V	$I_F=1mA$
	V_{F2}			0.95	V	$I_F=10mA$
	V_{F3}			1	V	$I_F=50mA$
	V_{F4}			1.1	V	$I_F=150mA$
Reverse current	I_R			5	nA	$V_R=75V$
Diode capacitance	C_{tot}		2		pF	$V_R=0V, f=1MHz$
Reverse recovery time	t_{rr}			3	μs	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$

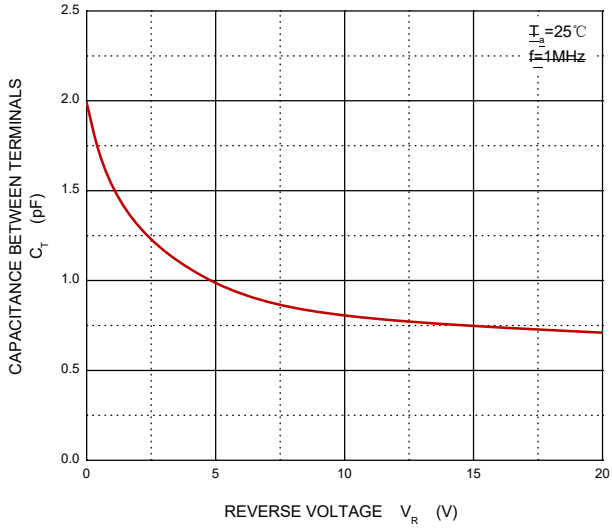
Forward Characteristics



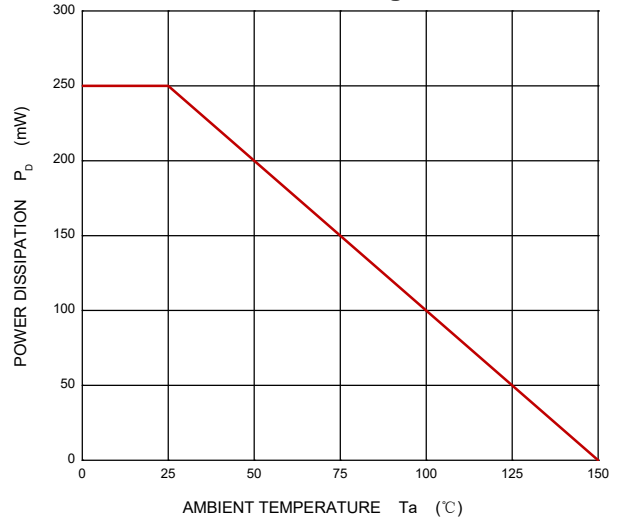
Reverse Characteristics



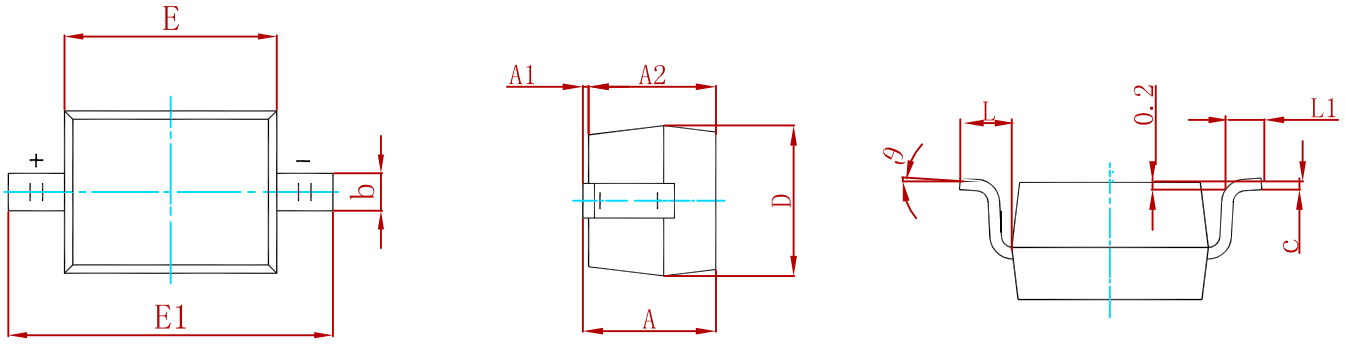
Capacitance Characteristics



Power Derating Curve

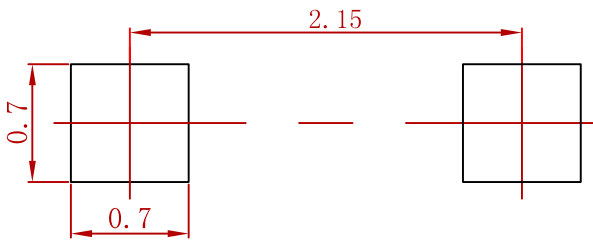


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:

1. Controlling dimension in millimeters.
2. General tolerance: ±0.05mm.
3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
BAV316	SOD-323	3000

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