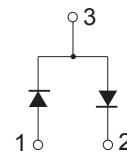
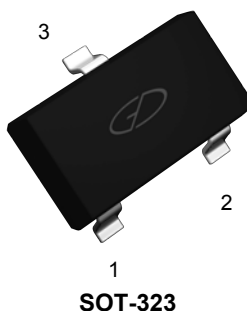


Features

- Fast switching speed
- High conductance
- SOT-323 small package
- RoHS compliant



Schematic Diagram

Applications

- High-speed switching in surface mounted circuits

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

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Forward Current	I_F	150	mA
Forward Power Dissipation	P_D	200	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}\text{C}$

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

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu\text{A}$	75	-	V
Forward Voltage	V_F	$I_F=1\text{mA}$	-	715	mV
		$I_F=10\text{mA}$	-	855	
		$I_F=50\text{mA}$	-	1000	
		$I_F=150\text{mA}$	-	1250	
Reverse Voltage Leakage Current	I_R	$V_R=75\text{V}$	-	2.5	μA
		$V_R=25\text{V}$	-	25	nA
Diode Capacitance	C_D	$V_R=0\text{V}$, $f=1\text{MHz}$	-	2.0	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \times I_R$, $R_L=100\Omega$	-	4.0	nS

Typical Characteristic Curves

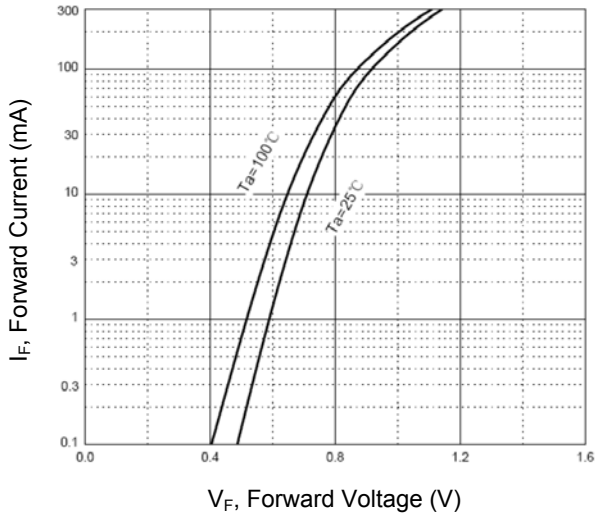


Figure 1. Forward Characteristics

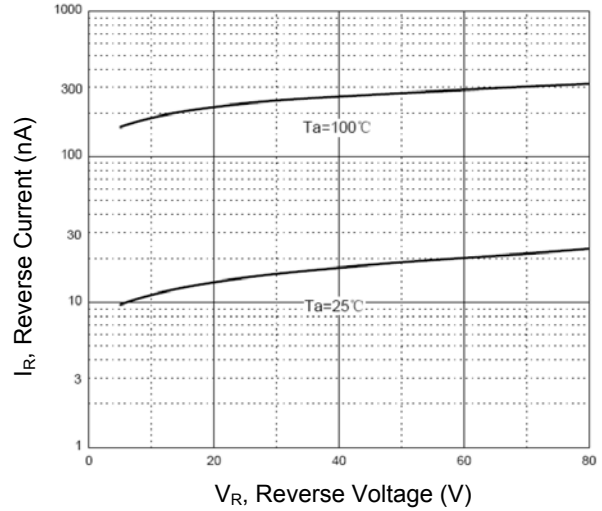


Figure 2. Reverse Characteristics

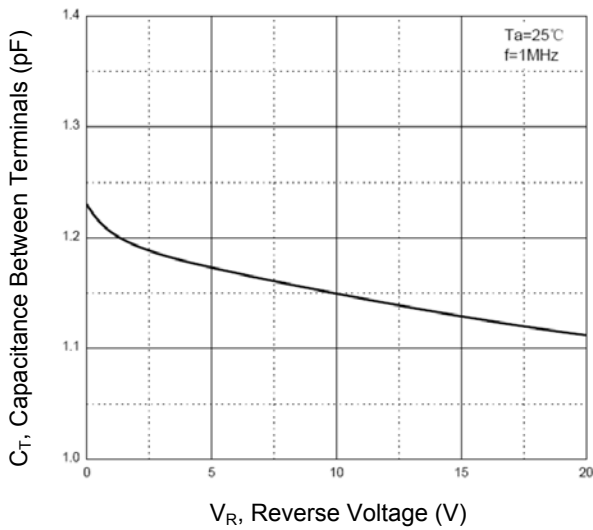


Figure 3. Capacitance Characteristics

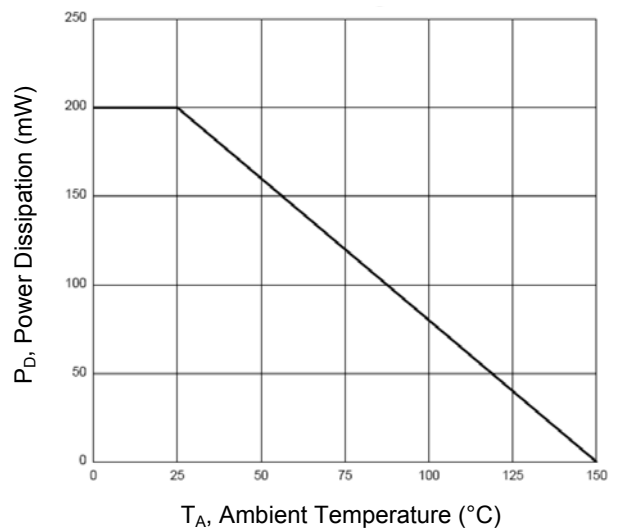
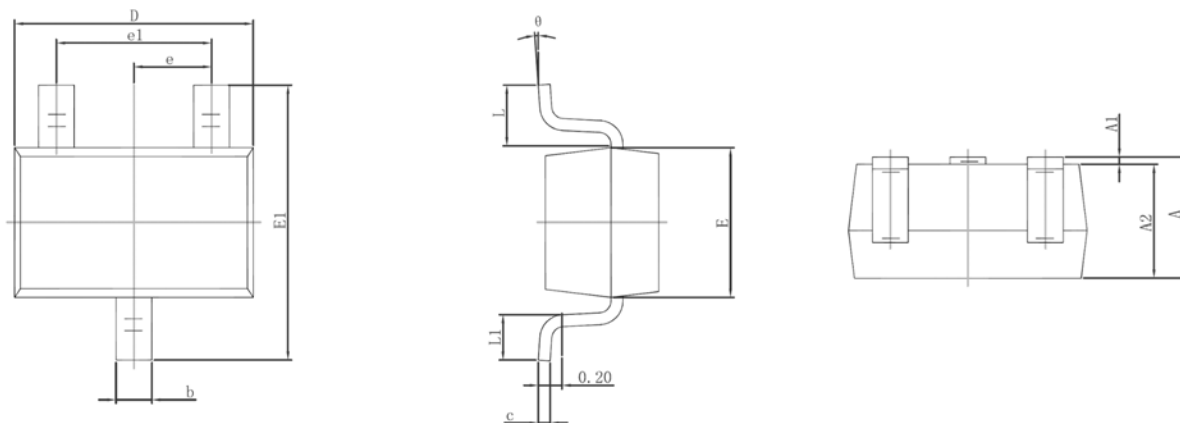


Figure 4. Power Derating Curve

Package Outline Dimensions (SOT-323)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	1.950	2.350	0.077	0.093
E	1.150	1.350	0.045	0.053
E1	2.000	2.450	0.078	0.096
e	0.650 TYP.		0.026 TYP.	
e1	1.200	1.400	0.047	0.055
L	0.525 REF.		0.021 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
BAV99W	SOT-323	KJG	Tape & Reel	3,000pcs / Reel	RoHS compliant