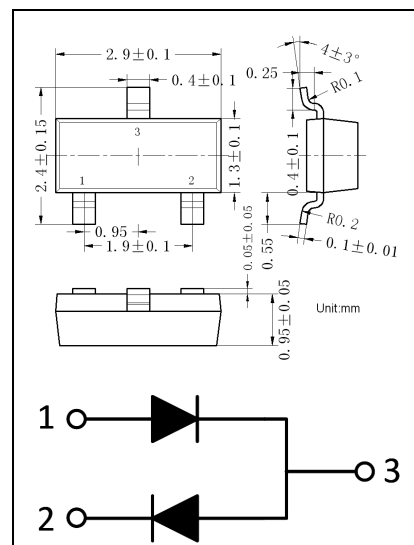


SOT-23 Plastic-Encapsulate Diodes

BAV99 Switching Diodes

Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



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

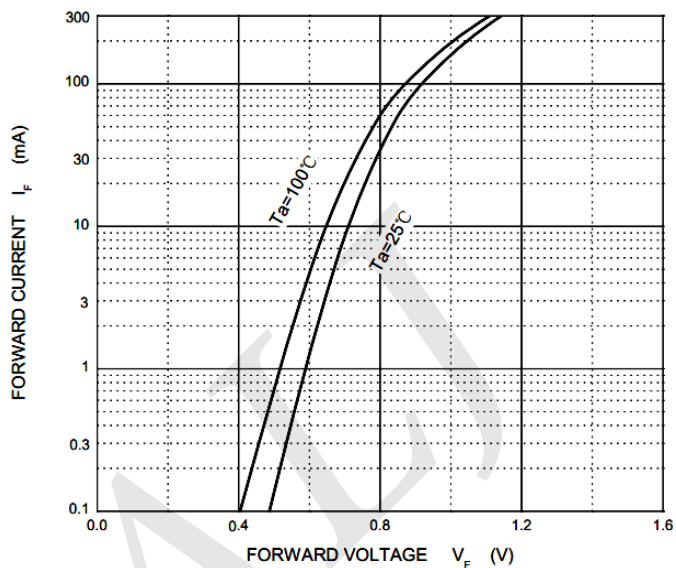
Symbol	Parameter	Value	Unit
V_R	Reverse Voltage	70	V
I_F	Forward Continuous Current	200	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2.0	A
P_D	Power Dissipation	225	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	556	$^{\circ}\text{C/W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55 ~ +150	$^{\circ}\text{C}$

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

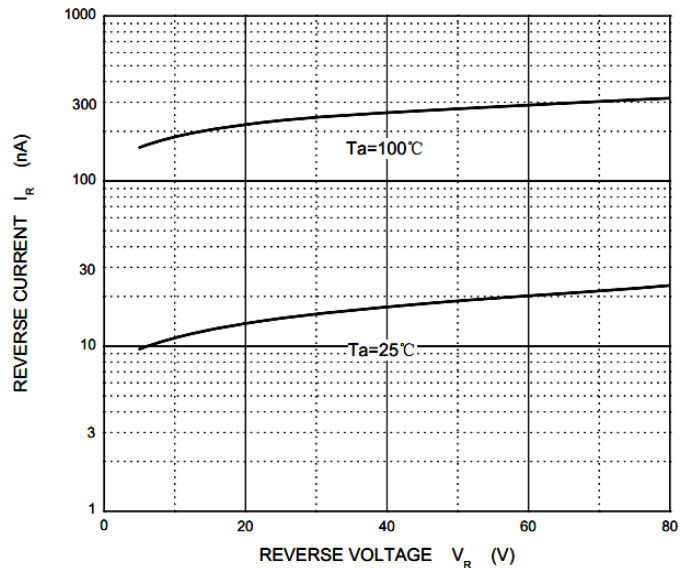
Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R = 100\mu\text{A}$	70			V
V_F	Forward voltage	$I_F = 1\text{mA}$			0.715	V
		$I_F = 10\text{mA}$			0.855	V
		$I_F = 50\text{mA}$			1	V
		$I_F = 150\text{mA}$			1.25	V
I_R	Reverse current	$V_R = 70\text{V}$			2.5	μA
C_D	Diode capacitance	$V_R = 0, f = 1\text{MHz}$			1.5	pF
t_{rr}	Reverse recovery time	$I_F = I_R = 10\text{mA}, I_{rr} = 0.1 \times I_R$ $R_L = 100\Omega$			6	ns

Typical Characteristics

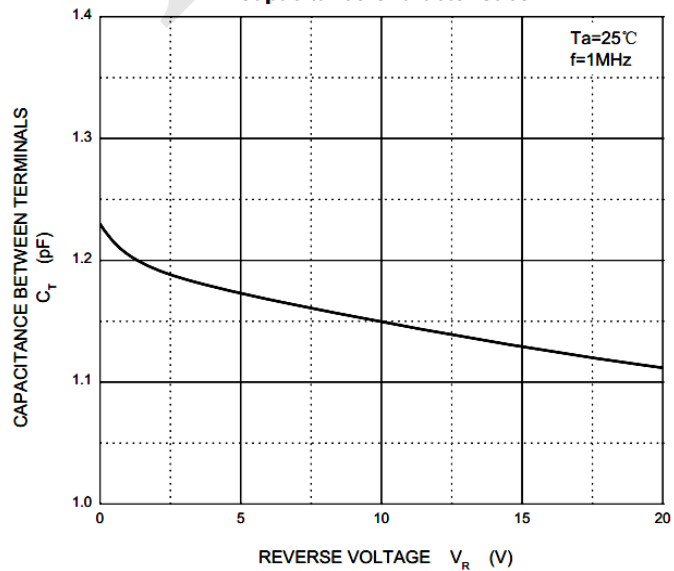
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

