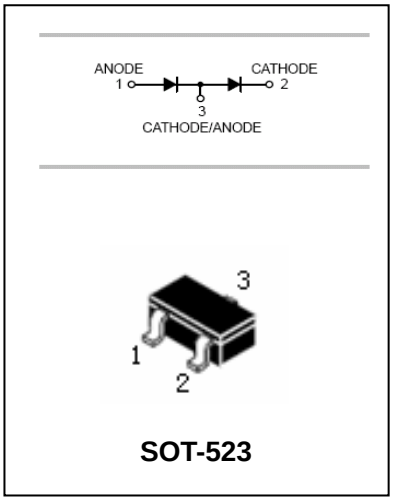
SURFACE MOUNT FAST SWITCHING DIODE **BAV99T**

FEATURES

- Ultra-Small Surface Mount Package.
- Fast switching speed
- For General Purpose Switching Applications
- High Conductance
- Also Available in Lead Free Version

Lead-free



SOT-523

ORDERING INFORMATION

Type No.	Marking	Package Code
BAV99T	JE	SOT-523

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Units**
V_{RRM}	Peak Repetitive Reverse Voltage	85	V
V_{RWM}	Working Peak Reverse Voltage	85	V
V_R	DC Blocking Voltage	85	V
$V_{R(RMS)}$	RMS Reverse Voltage	60	V
I_{FM}	Forward Continuous Current single diode Both diodes	155 75	mA
I_{FRM}	Repetitive Peak Forward Current	500	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @t=1.0μs @t=1.0ms @t=1.0s	 4 1 0.5	A
P_d	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	833	℃/W
T_j, T_{stg}	Junction and Storage Temperature	-65~150	℃

SURFACE MOUNT FAST SWITCHING DIODE **BAV99T**

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R=100uA	85		V
Leakage current	I_R	V_R=25V V_R=75V V_R=25V,T_j=150℃ V_R=75V,T_j=150℃		30 2 60 100	nA μA μA μA
Forward voltage	V_F	I_F=1mA I_F=10mA I_F=50mA I_F=150mA		0.715 0.855 1 1.25	V
Typical Total Capacitance	C_T	V_R=0V,f=1MHz		1.5	pF
Reverse recovery Time	t_{rr}	I_F=I_R=10mA,I_{rr}=0.1*I_R,R_L=100Ω		4	ns

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

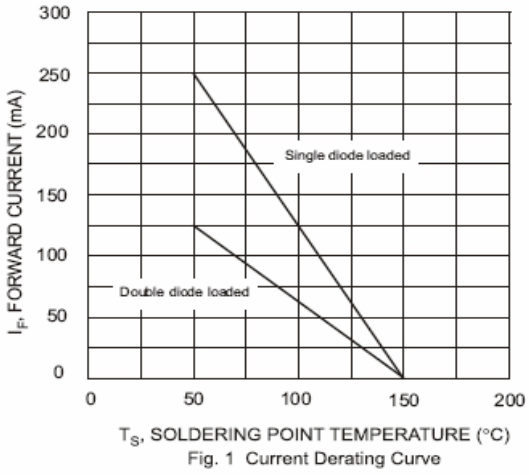


Fig. 1 Current Derating Curve

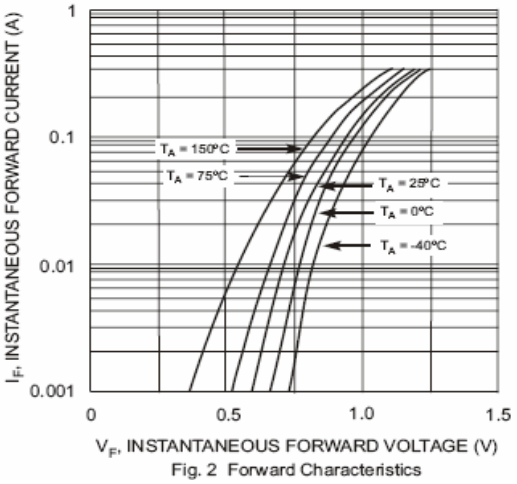


Fig. 2 Forward Characteristics

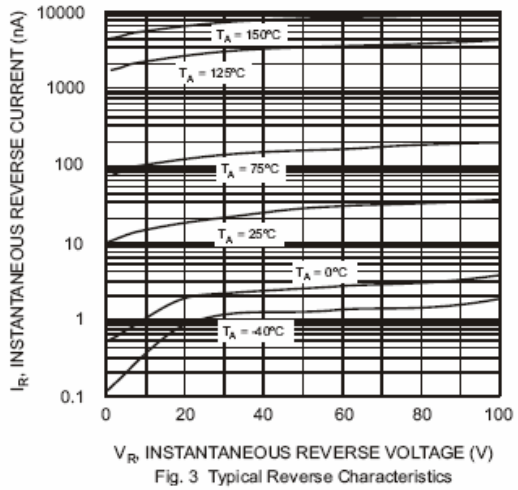


Fig. 3 Typical Reverse Characteristics

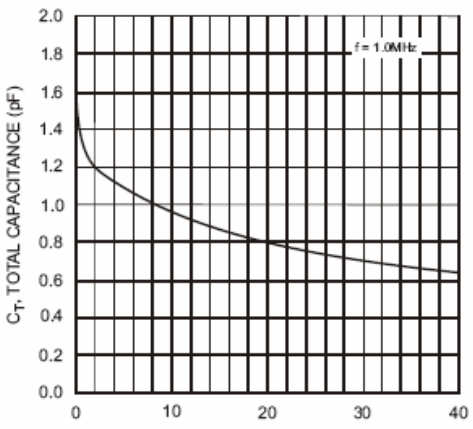
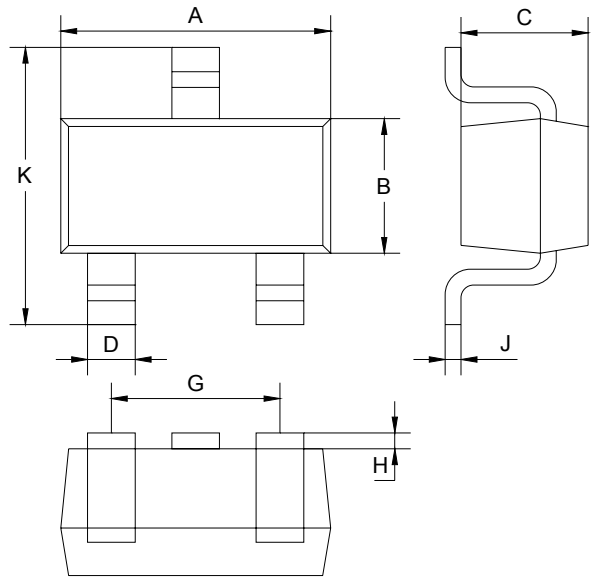


Fig. 4 Typical Capacitance vs. Reverse Voltage

SURFACE MOUNT FAST SWITCHING DIODE **BAV99T**

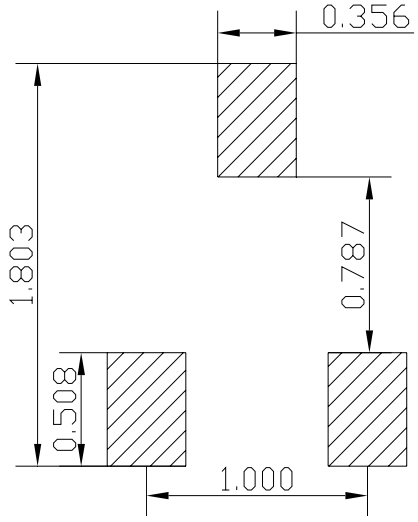
PACKAGE OUTLINE

Plastic surface mounted package SOT-523



SOT-523		
Dim	Min	Max
A	1.5	1.7
B	0.75	0.85
C	0.6	0.8
D	0.15	0.3
G	0.9	1.1
H	0.02	0.1
J	0.1Typical	
K	1.45	1.75
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
BAV99T	SOT-523	3000/Tape&Reel