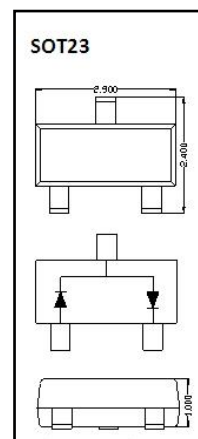


DATA SHEET

BAV99

- ◇ Fast Switching Speed
- ◇ For General Purpose Switching Applications
- ◇ High Conductance
- ◇ Low Current Leakage
- ◇ Small Outline Surface Mount Package
- ◇ RoHS compliant / Green EMC

Device Marking Code	
BAV99	A7



MAXIMUM RATINGS (Ta = 25 °C)

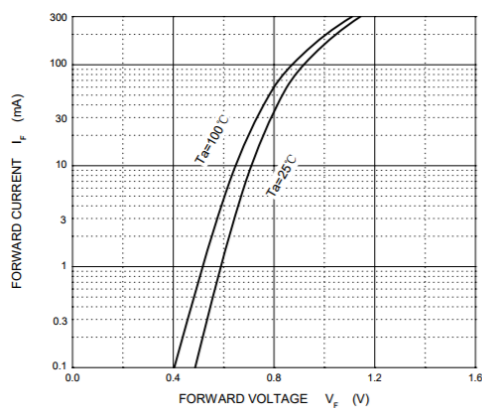
Symbol	Parameter	Value	Units
V _R	Reverse Voltage	70	V
I _F	Forward Current	200	mA
R _{θJA}	Thermal Resistance Junction to Ambient	556	°C/W
I _{FSM}	Non-Repetitive Peak Forward Surge Current*1	2.0	A
P _D	Power Dissipation	225	mW
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

*1 8.3 ms single half sine-wave

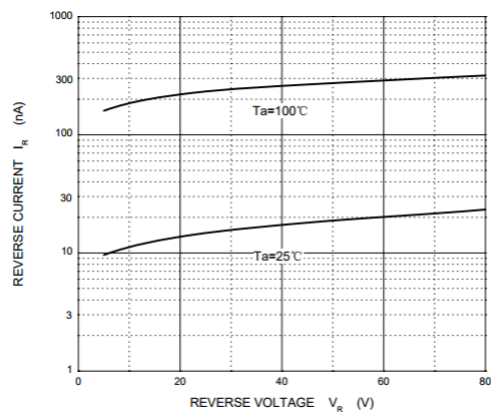
ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Symbol	Parameter	Test Conditions	Min	Max	Units
V _F	Forward Voltage	I _F =1mA		0.715	V
		I _F =10mA		0.855	V
		I _F =50mA		1	V
		I _F =150mA		1.25	V
V _R	Reverse breakdown voltage	I _R =100uA	75		V
I _R	Reverse voltage leakage current	V _R =70V		2.5	uA
C _T	Capacitance between terminals	V _R =0V, f=1MHz		2	pF
T _{rr}	Reverse recovery time	I _F = I _R =10mA I _{rr} =0.1×I _R , R _L =100Ω		6	nS

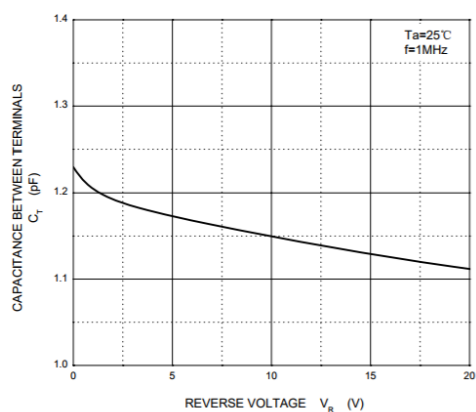
Typical characteristics



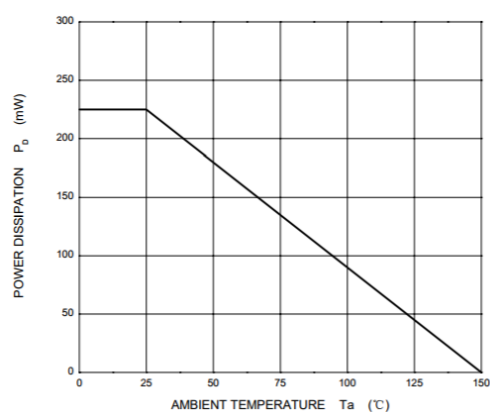
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

ORDERING INFORMATION

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BAV99	SOT23	Tape & Reel 3000pcs /7" Reel	8mm	4mm	Conductive	

PACKAGE DIMENSIONS

Package Outline :SOT23

The diagram illustrates the SOT23 package outline in three views: top, side, and cross-sectional. The top view shows a rectangular package with a central notch and two side flaps. Dimensions A, B, C, D, E, and F are indicated. The side view shows the package's profile with dimensions G, H, and J. The cross-sectional view shows the package's internal structure with dimensions K and L. A dashed green line indicates the center of the package.

SOT23 Package Outline

Symbol	Dimensions in mm	
	Min.	Max.
A	2.800	3.040
B	2.100	2.640
C	1.200	1.400
D	0.890	1.030
E	1.780	2.050
F	0.450	0.600
G	0.013	0.100
H	0.900	1.110
J	0.090	0.180
K	0.370	0.510

Note:

- 1.Habgen free ,EMC
- 2.Pb free solder
- 3: Lead thickness solder plating
4. Lead frame CAC-5
- 5.Other Tolerance ± 0.05
- 6.Dimensions are exclusive of Burrs Mold Flash and Tie Bar extrusions
- 7.Unit :mm

SOT23 Package Outline

NOTICE

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