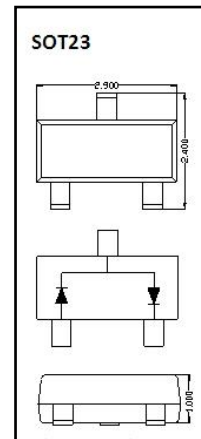


## DATA SHEET

### BAV199

- ◇ 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	
<b>BAV199</b>	<b>JY</b>



#### MAXIMUM RATINGS (T<sub>a</sub> = 25 °C)

Symbol	Parameter	Value	Units
V <sub>R</sub>	Reverse Voltage	70	V
I <sub>F</sub>	Forward Current	500	mA
I <sub>FSM</sub>	Non-Repetitive Peak Forward Surge Current*1	1.0	A
P <sub>D</sub>	Power Dissipation	200	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C

\*1 8.3 ms single half sine-wave

#### ELECTRICAL CHARACTERISTICS (T<sub>a</sub> = 25 °C)

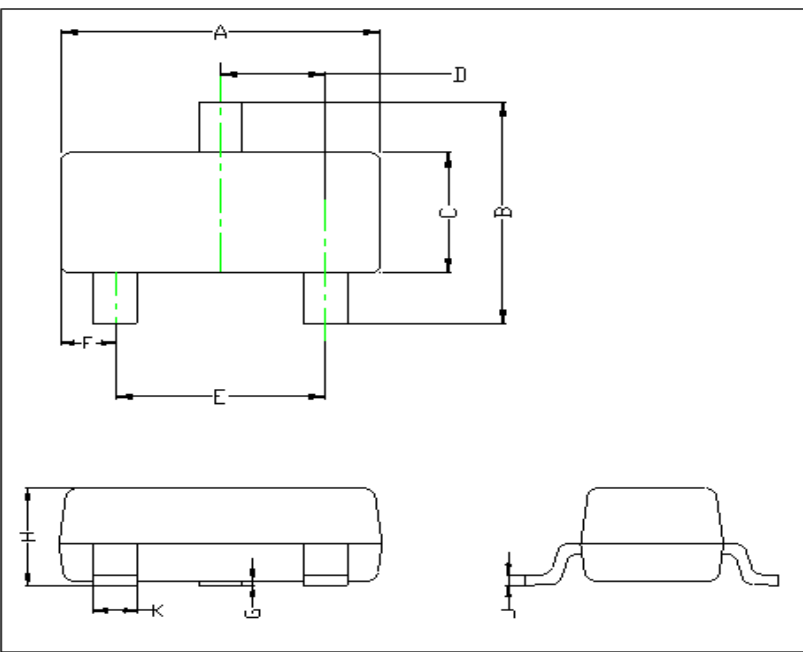
Symbol	Parameter	Test Conditions	Min	Max	Units
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> =1mA		0.9	V
		I <sub>F</sub> =10mA		1.0	V
		I <sub>F</sub> =50mA		1.1	V
		I <sub>F</sub> =150mA		1.25	V
V <sub>R</sub>	Reverse breakdown voltage	I <sub>R</sub> =100uA	70		V
I <sub>R</sub>	Reverse voltage leakage current	V <sub>R</sub> =70V		5	nA
C <sub>D</sub>	Diode capacitance	V <sub>R</sub> =0V, f=1MHz		2	pF
T <sub>rr</sub>	Reverse recovery time	I <sub>F</sub> = I <sub>R</sub> =10mA		3	uS

**ORDERING INFORMATION**

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BAV199	SOT23	Tape & Reel 3000pcs /7" Reel	8mm	4mm	Conductive	

**PACKAGE DIMENSIONS**

**Package Outline : SOT23**



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

**SOT23 Package Outline**

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