

## Dual surface mount low leakage diode

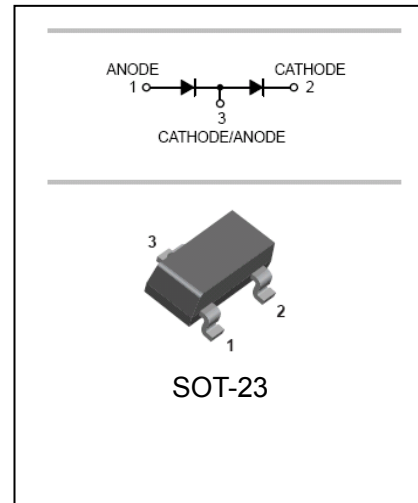
## BAV199

### FEATURES

- Medium speed current applications.
- Very low leakage current.
- Surface mount package ideally suited for automatic insertion



Lead-free



### APPLICATIONS

- Small signal switching

### ORDERING INFORMATION

Type No.	Marking	Package Code
BAV199	JY	SOT-23

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage Working peak reverse voltage DC Reverse voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	85	V
RMS Reverse Voltage	$V_{R(RMS)}$	60	V
Peak forward surge current @t=1.0µs @t=1.0ms @t=1.0s	$I_{FSM}$	4.0 1.0 0.5	A
Forward continuous current single diode double diode	$I_{FM}$	160 140	mA
Repetitive Peak Forward Current	$I_{FRM}$	500	mA
Power dissipation	$P_d$	250	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	°C/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65-150	°C

### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	85		V
Reverse voltage leakage current	$I_R$	$V_R=75V$		5.0	nA
		$V_R=75V T_j=150^\circ C$		80	nA
Forward voltage	$V_F$	$I_F=1mA$		900	mV
		$I_F=10mA$		1000	
		$I_F=50mA$		1100	
		$I_F=150mA$		1250	
Junction capacitance	$C_j$	$V_R=0V f=1MHz$		2.0	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10mA I_{rr}=0.1 \cdot I_R$ $R_L=100\Omega$		3.0	$\mu S$

### TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

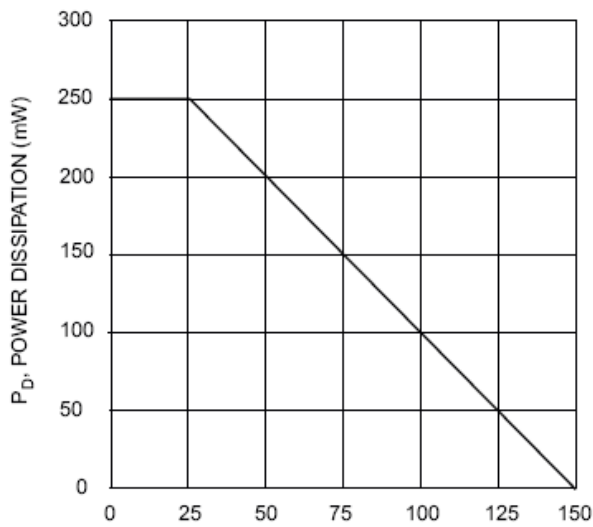


Fig. 1 Power Derating Curve

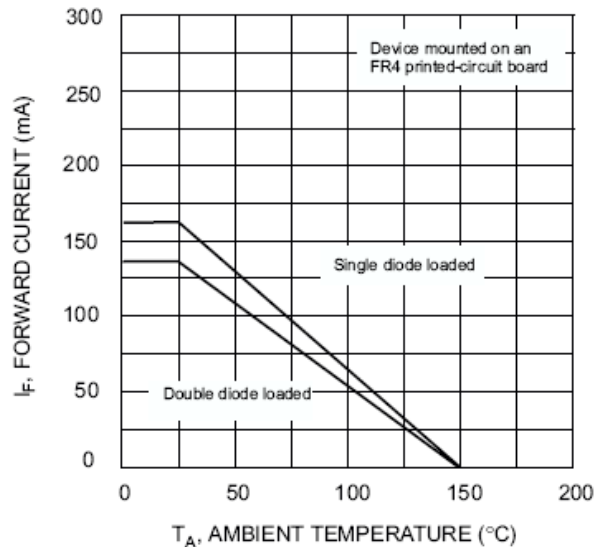


Fig. 2 Current Derating Curve

# Diode Semiconductor Korea

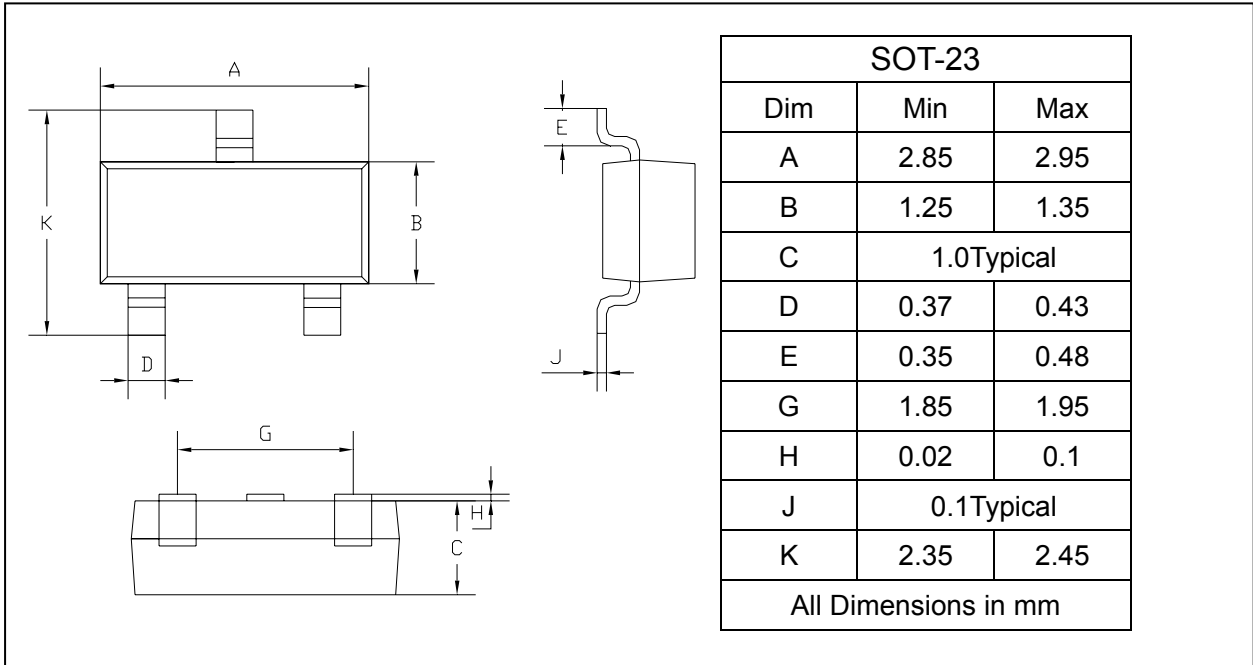
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**BAV199**

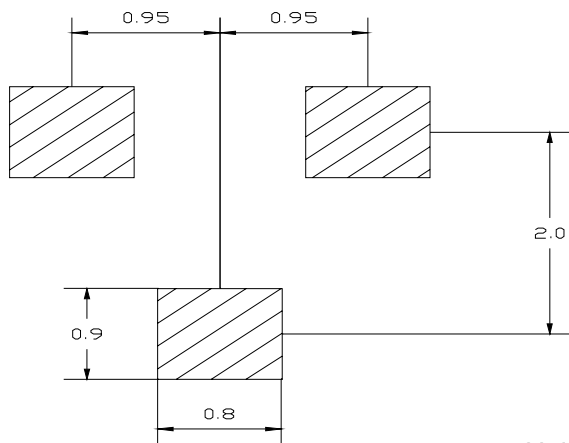
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
BAV199	SOT-23	3000/Tape&Reel