

Dual surface mount low leakage diode

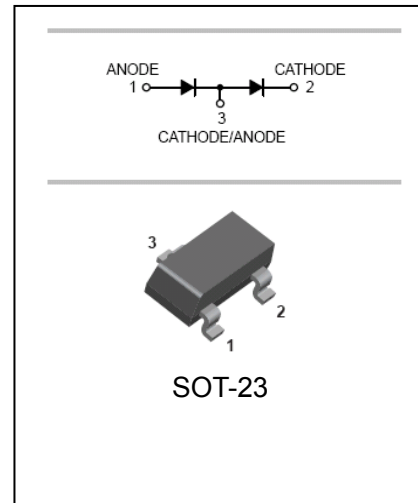
BAV199

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 to +150	°C



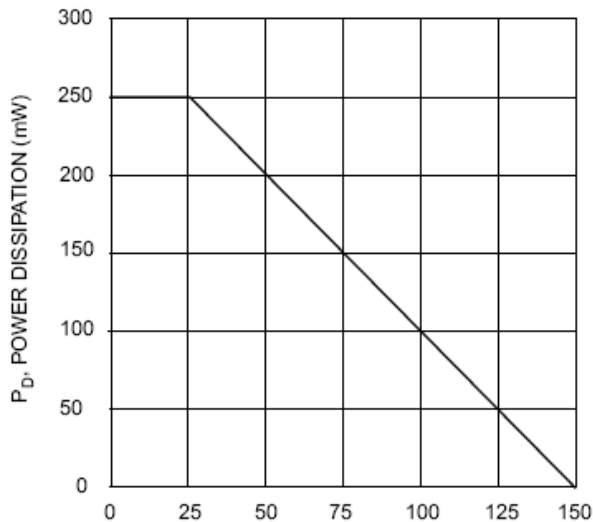
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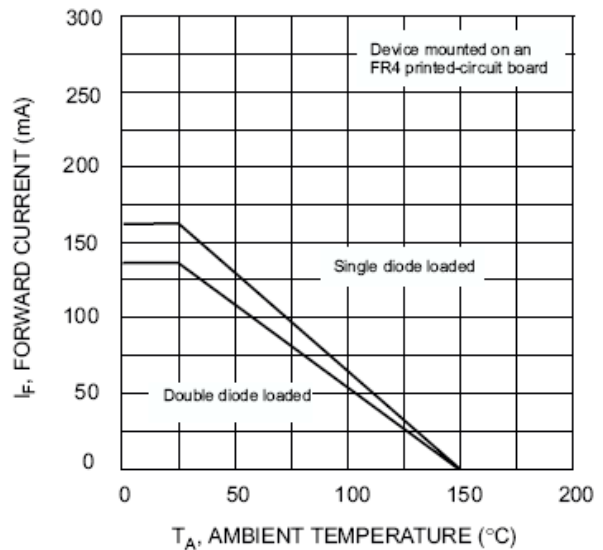
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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	$V_R=75V$ $V_R=75V T_j=150^\circ C$		5.0 80	nA nA
Forward voltage	V_F	$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$		900 1000 1100 1250	mV
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	μS

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



T_A, AMBIENT TEMPERATURE (°C)
Fig. 1 Power Derating Curve



T_A, AMBIENT TEMPERATURE (°C)
Fig. 2 Current Derating Curve



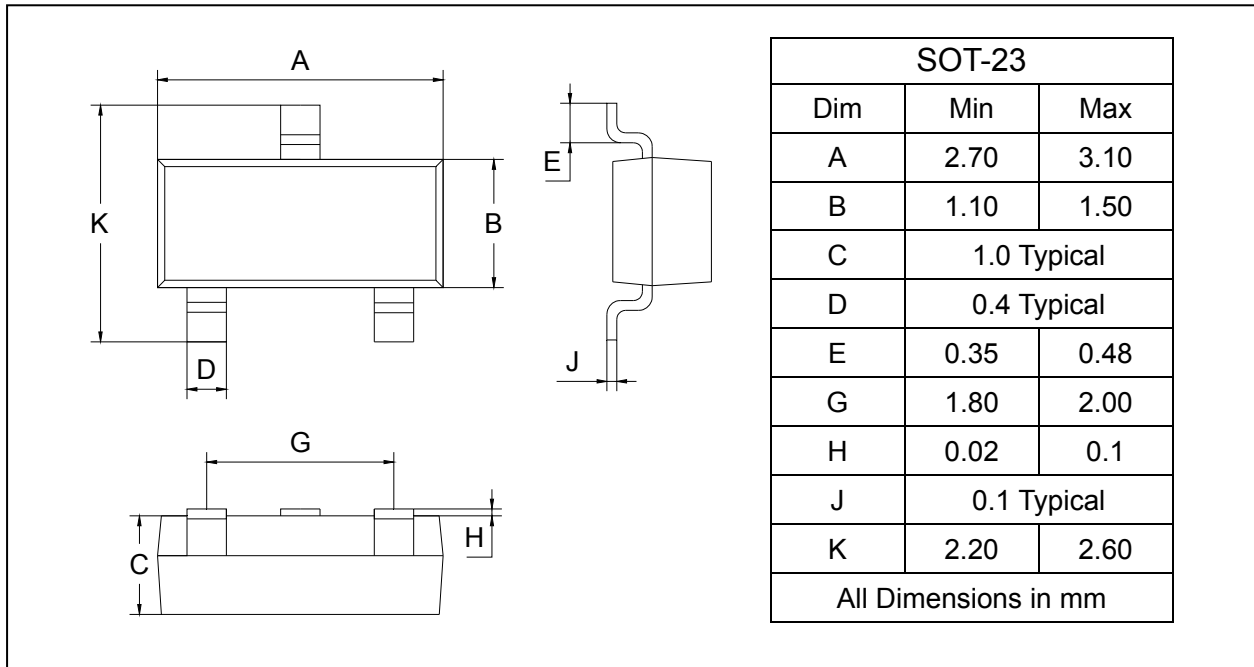
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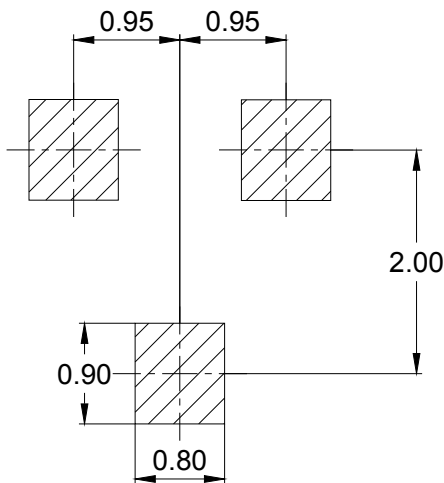
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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