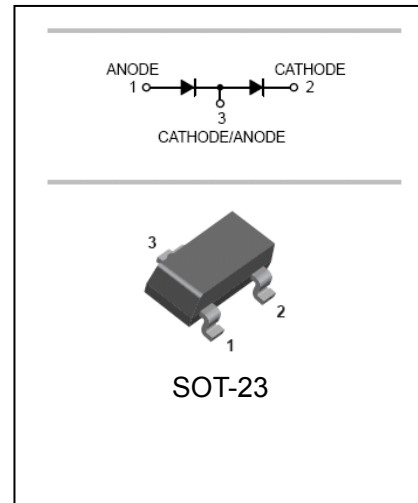


Dual surface mount low leakage diode

BAV199

FEATURES

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



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	V_{RRM}	85	V
Working peak reverse voltage	V_{RWM}		
DC Reverse voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	60	V
Peak forward surge current	I_{FSM}	@t=1.0μs 4.0	A
		@t=1.0ms 1.0	
		@t=1.0s 0.5	
Forward continuous current	I_{FM}	single diode 160	mA
		double diode 140	
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

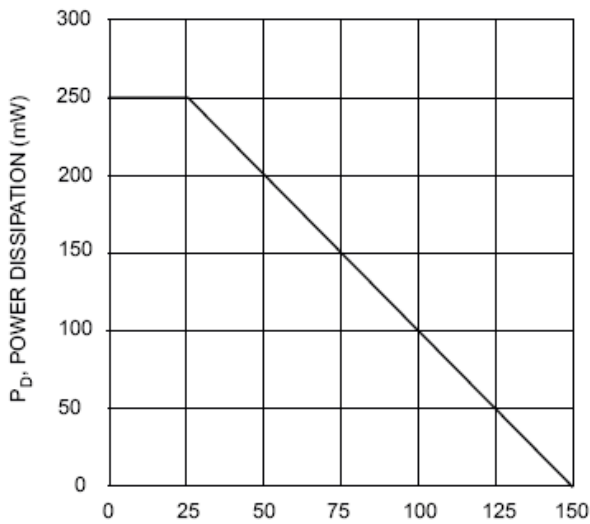
Dual surface mount low leakage diode

BAV199

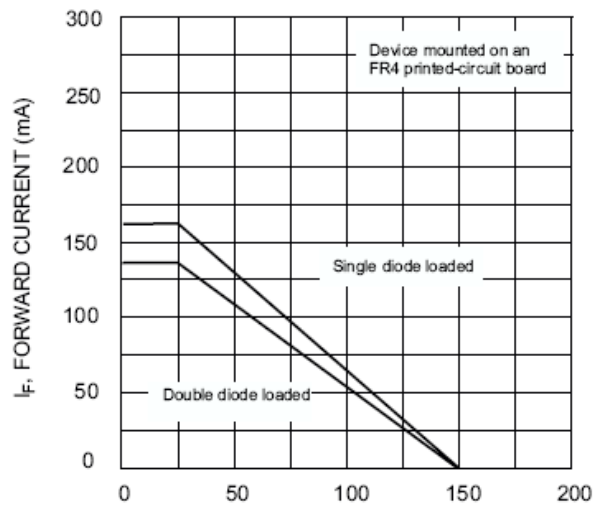
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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	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

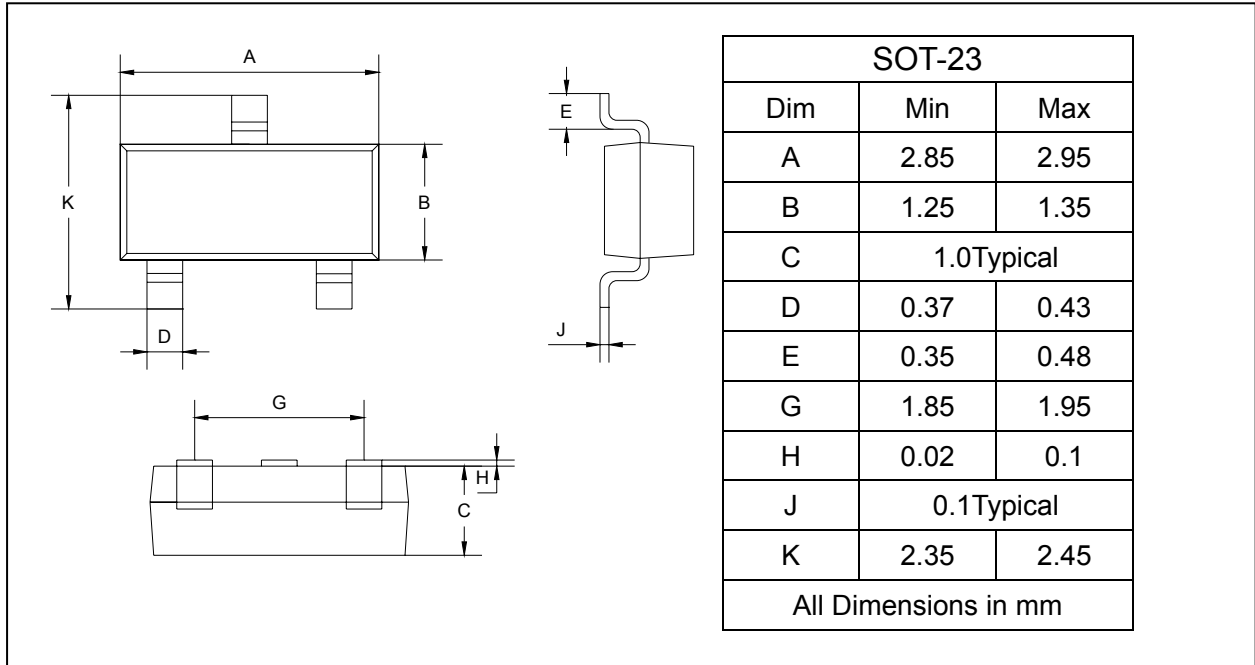
Dual surface mount low leakage diode

BAV199

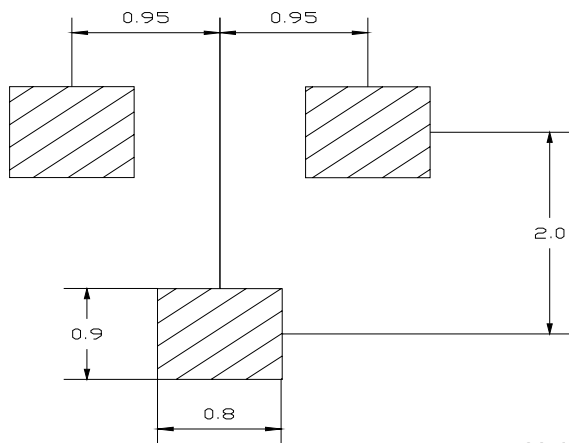
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

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