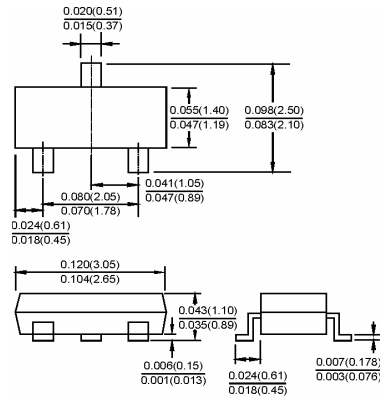


SOT-23



Dimensions in inches and (millimeters)

Features

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

Applications

- ✧ Small signal switching

Ordering Information

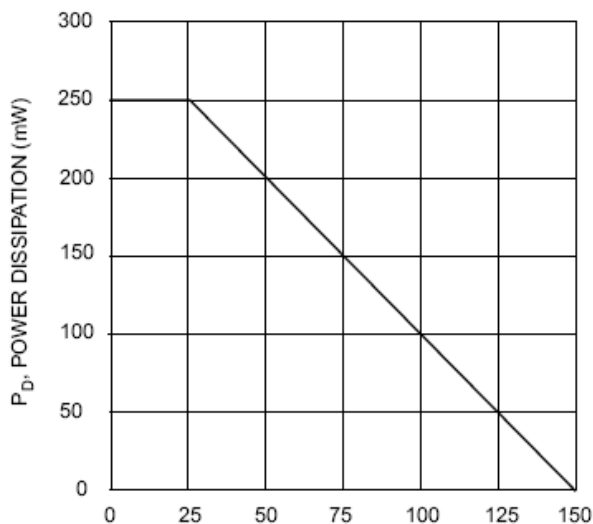
Type No.	Marking	Package Code
BAV199	JY	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

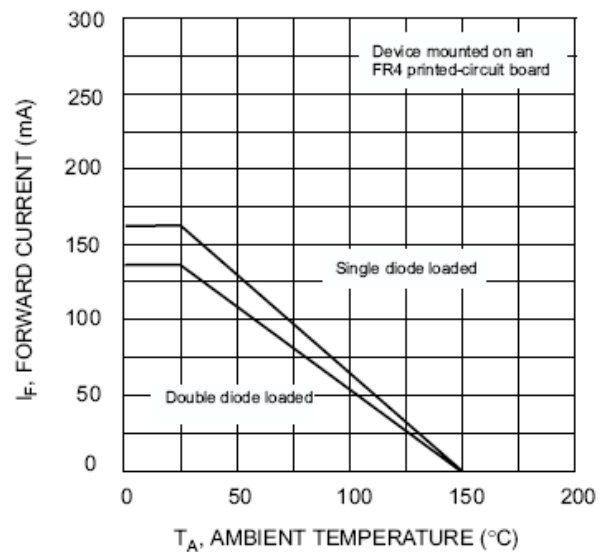
Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	85	V
Working peak reverse voltage	V_{RWM}		
DC Reverse voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	60	V
Peak forward surge current	I_{FSM}	@t=1.0μs 4.0	A
		@t=1.0ms 1.0	
		@t=1.0s 0.5	
Forward continuous current	I_{FM}	single diode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


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

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOT-23	3000/REEL	90000	40X20X22	5.00	4.00