

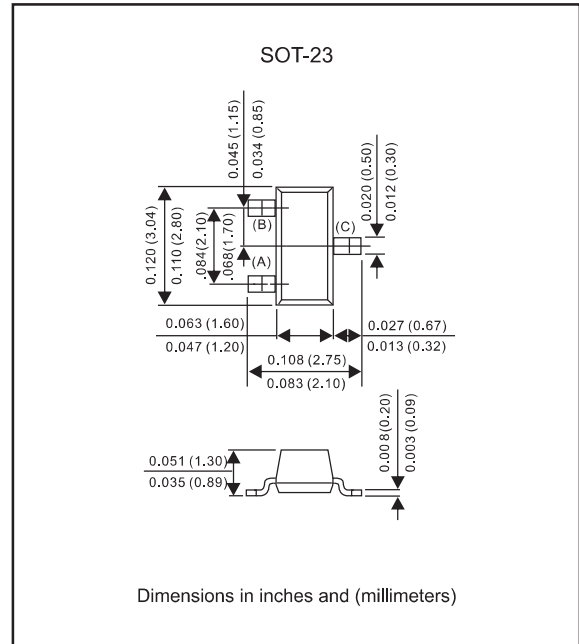
### Features

- Fast speed switching.
- For general purpose switching application.
- High conductance.
- Silicon epitaxial planar chip.
- Lead-free parts meet RoHS requirements.
- Compliant to Halogen-free

### Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOT-23
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Mounting Position : Any

### Package outline



### Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Reverse Breakdown Voltage	$V_{BR}$	V		70
Average Forward Current	$I_{FAV}^{[1]}$	mA		215
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	A	$t_p=1\ \mu\text{s}$	4
Power Dissipation	$P_D$	mW		200
Maximum Junction Temperature	$T_j$	$^{\circ}\text{C}$		-55 to +150
Storage Temperature Range	$T_{stg}$	$^{\circ}\text{C}$		-55 to +150

[1] Single diode loaded

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN.	TPY.	MAX.
Forward Voltage	$V_F$	mV	$I_F=1\text{mA}$			900
			$I_F=10\text{mA}$			1000
			$I_F=50\text{mA}$			1100
			$I_F=150\text{mA}$			1250
Reverse Current	$I_R$	nA	$V_R=75\text{V}$			5
Reverse Breakdown Voltage	$V_{BR}$	V	$I_R=100\mu\text{A}$	70		
Junction Capacitance	$C_j$	pF	$V_R=0\text{V}$ , $f=1\text{MHz}$			4
Reverse Recovery Time	$t_{rr}$	$\mu\text{s}$	$I_F=I_R=10\text{mA}$ , $I_{rr}=0.1I_R$ , $R_L=100\Omega$			3

## Rating and characteristic curves

Fig.1 - Forward Characteristics

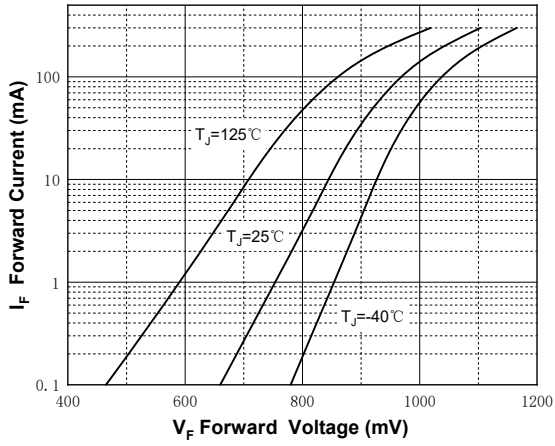


Fig.2 - Reverse Characteristics

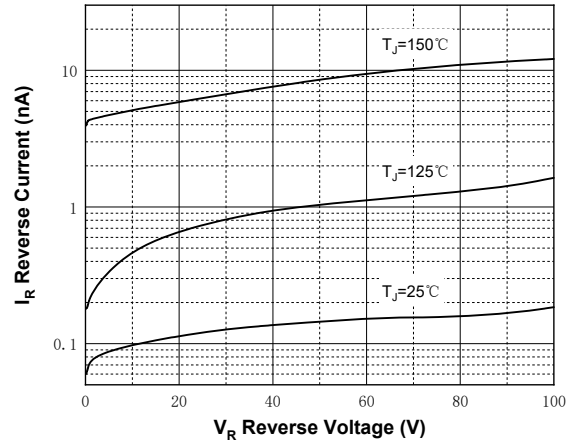
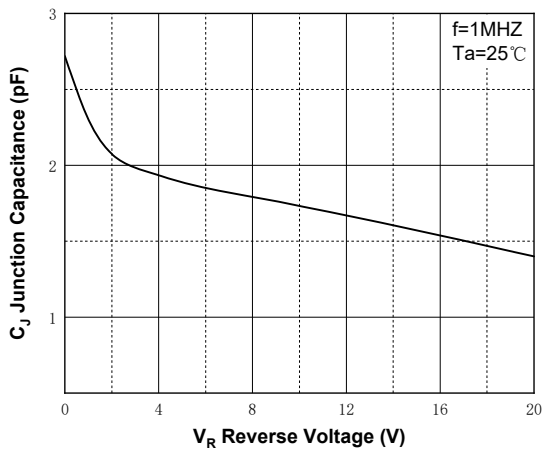
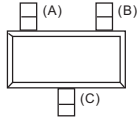
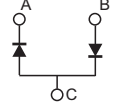


Fig.3 - Junction Capacitance

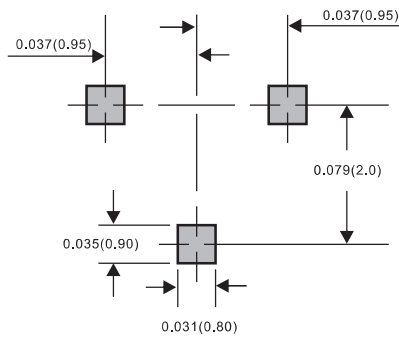


## Pinning information

Type number	Marking code	Simplified outline	Symbol
BAV199	JY		

## Suggested solder pad layout

SOT-23



Dimensions in inches and (millimeters)