

## Small-Signal Fast Switching Diodes

### Features

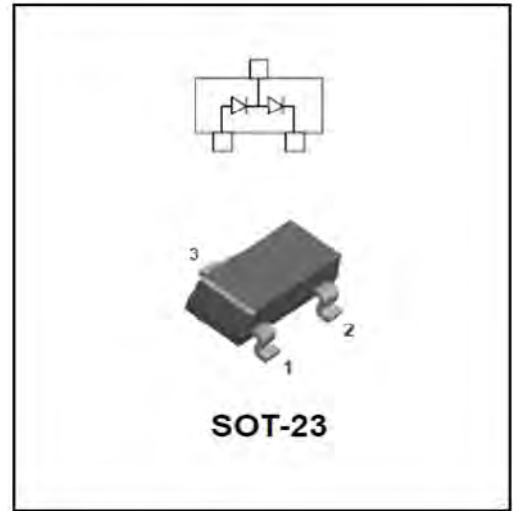
- VR 100V
- I<sub>FAV</sub> single diode loaded 215mA  
double diode loaded 125mA

### Typical Applications

- Low-Leakage

### Mechanical Data

- **Package:** SOT-23
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** JY



### ■ Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V <sub>RRM</sub>	V		100
Reverse voltage	V <sub>R</sub>	V	IR=100uA	100
Peak forward surge current	IFSM	A	Non-Repetitive t = 1 μs	4
Average forward current	I <sub>FAV</sub>	mA	single diode loaded	215
			double diode loaded	125
Power dissipation	P <sub>tot</sub>	mW		250
Maximum junction temperature	T <sub>j</sub>	°C		150
Storage temperature range	T <sub>stg</sub>	°C		-55 to +150

### ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	V <sub>R</sub>	V	IR=100uA	100	
Forward Voltage	V <sub>F</sub>	V	IF=1mA		0.9
			IF=10mA		1.0
			IF=50mA		1.1
			IF=150mA		1.25
Reverse Leakage Current	I <sub>R</sub>	nA	VR=75V		5
Capacitance	C	pF	VR=0V, f=1MHz		4
Reverse Recovery Time	T <sub>rr</sub>	us	IF=IR=10mA, Irr=0.1*IR, RL=100Ω		3

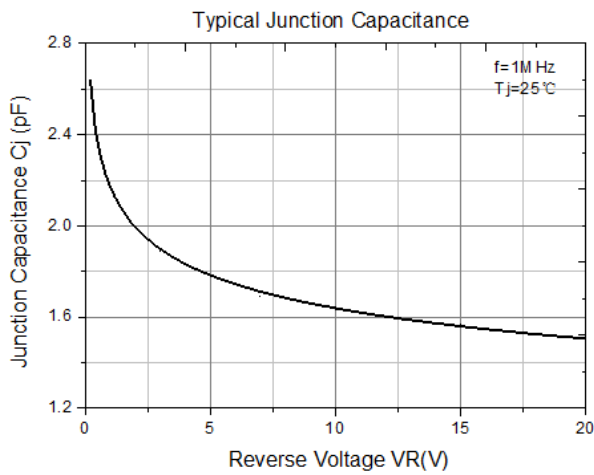
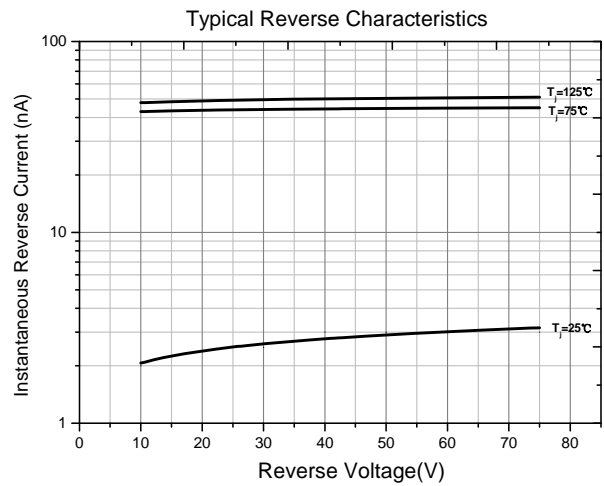
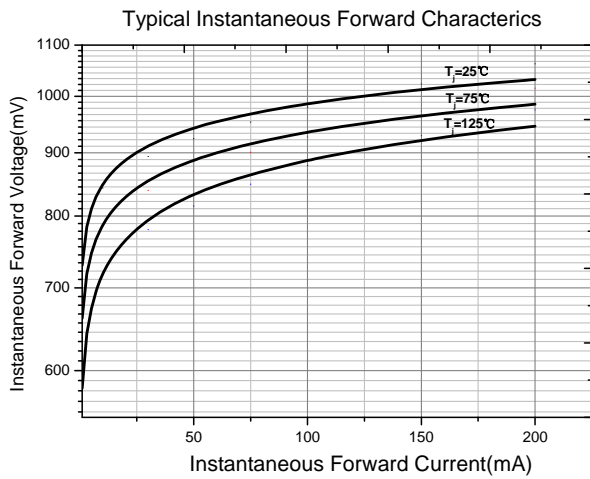


# BAV199

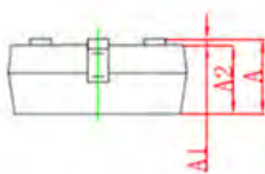
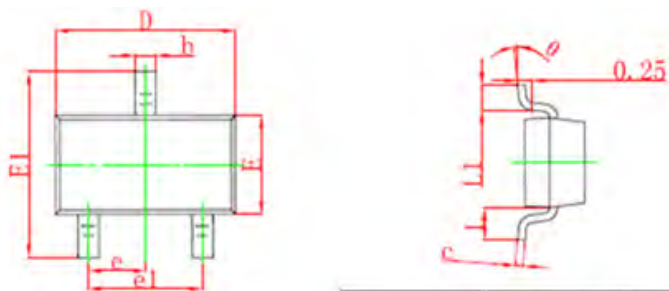
## Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAV199	F2	Approximate 0.008	3000	30000	120000	7" reel

## Characteristics (Typical)



## ■ SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.350	0.089	0.100
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
α	0°	8°	0°	8°

## ■ SOT-23 Suggested Pad Layout

