

**SMALL SIGNAL DIODE**

**FEATURES**

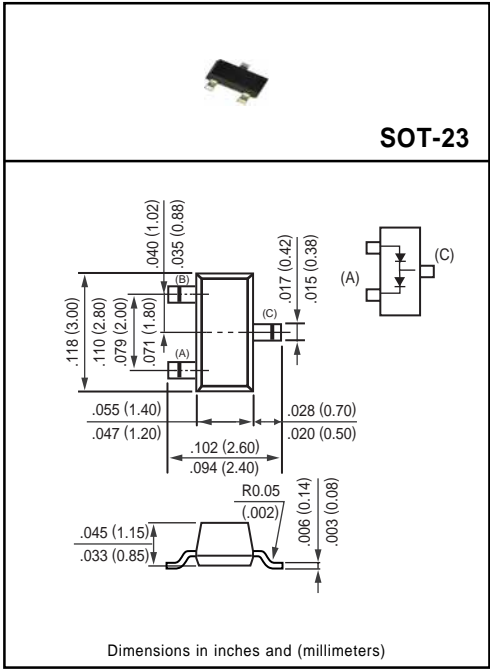
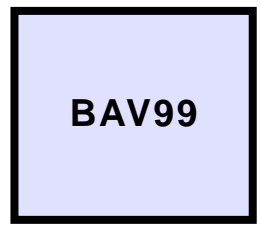
- \* Silicon epitaxial planar diode
- \* Fast switching
- \* Surface mounting device

**MECHANICAL DATA**

- \* Epoxy : Device has UL flammability classification 94V-0
- \* Weight : approx. 0.008g

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.



**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	BAV99	UNITS
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	70	Volts
Forward Continuous Current at T <sub>A</sub> =25 °C	I <sub>F</sub>	150	mA
Repetitive Peak Forward Current at T <sub>A</sub> =25 °C	I <sub>FRM</sub>	500	mA
Surge Forward Current at tp < 1 S, at T <sub>A</sub> =25 °C	I <sub>FSM</sub>	1000	mA
Total Power Dissipation	P <sub>D</sub>	250	m W
Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to + 150	°C

**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	Value	Unit	Testing Condition
Reverse Breakdown Voltage	V(BR)R	70	V	I <sub>r</sub> =100μA
Forward Voltage	V <sub>F</sub> (1)	715	mV	I <sub>f</sub> =1mA
	V <sub>F</sub> (2)	855	mV	I <sub>f</sub> =10mA
	V <sub>F</sub> (3)	1000	mV	I <sub>F</sub> =50mA
	V <sub>F</sub> (4)	1250	mV	I <sub>f</sub> =150mA
Reverse Current	I <sub>R</sub>	2.5	μA	V <sub>r</sub> =70V
Total Capacitance	C <sub>T</sub>	1.5	pF	V <sub>r</sub> =0V, F=1MHZ
Reverse Recovery Time	T <sub>rr</sub>	6	nS	I <sub>f</sub> =I <sub>r</sub> =10mA, R <sub>L</sub> =100 ohm, measured at i <sub>r</sub> =1mA

## CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT & FORWARD VOLTAGE

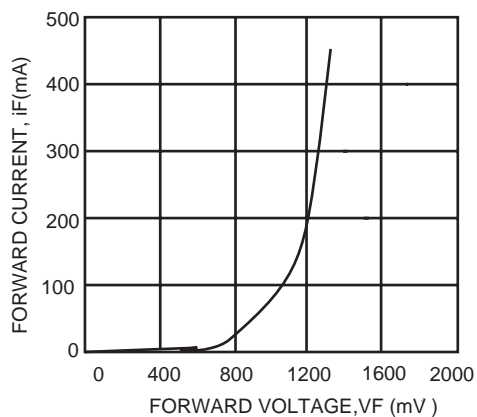


FIG. 2 - DIODE CAPACITANCE

