

SMALL SIGNAL DIODE

FEATURES

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

MECHANICAL DATA

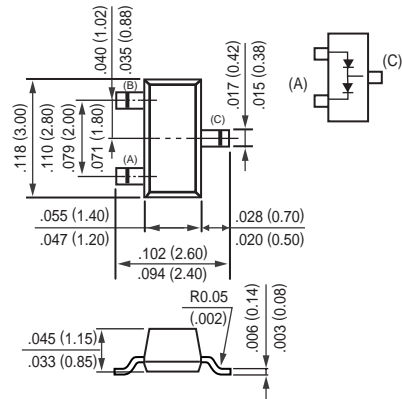
- * Epoxy : Device has UL flammability classification 94V-0
- * Weight : approx. 0.008g

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%.



SOT-23



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	BAV99	UNITS
Repetitive Peak Reverse Voltage	V_{RRM}	70	Volts
Forward Continuous Current at $T_A=25^\circ\text{C}$	I_F	150	mA
Repetitive Peak Forward Current at $T_A=25^\circ\text{C}$	I_{FRM}	500	mA
Surge Forward Current at $t_p < 1 \text{ S}$, at $T_A=25^\circ\text{C}$	I_{FSM}	1000	mA
Total Power Dissipation	P_D	250	m W
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to + 150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	Value	Unit	Testing Condition
Reverse Breakdown Voltage	V(BR)R	70	V	$I_r=100\mu\text{A}$
Forward Voltage	VF(1)	715	mV	$I_f=1\text{mA}$
	VF(2)	855	mV	$I_f=10\text{mA}$
	VF(3)	1000	mV	$I_f=50\text{mA}$
	VF(4)	1250	mV	$I_f=150\text{mA}$
Reverse Current	I_R	2.5	μA	$V_r=70\text{V}$
Total Capacitance	C_T	1.5	pF	$V_r=0\text{V}, F=1\text{MHz}$
Reverse Recovery Time	T_{rr}	6	nS	$I_f=I_r=10\text{mA}, R_L=100\text{ohm}$, measured at $i_r=1\text{mA}$

CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT & FORWARD VOLTAGE

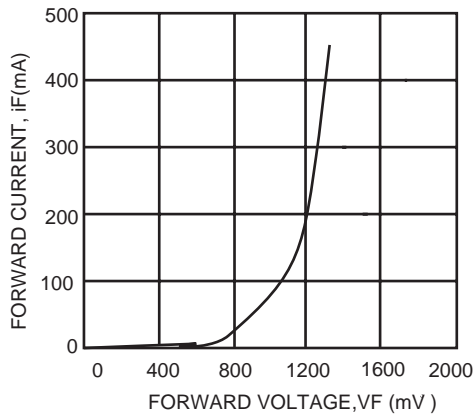


FIG. 2 - DIODE CAPACITANCE

