

SMALL SIGNAL DIODE

FEATURES

- * Silicon epitaxial planar diode
- * Fast switching
- * Surface mounting device
- * "A7" Device marking

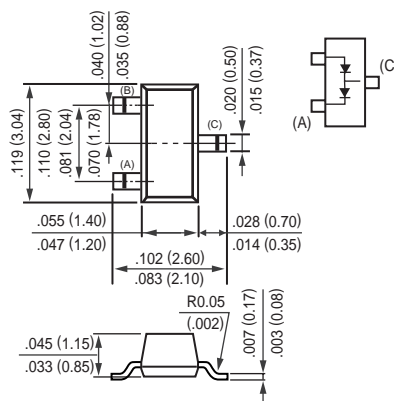
MECHANICAL DATA

- * Epoxy : Device has UL flammability classification 94V-0
- * Weight : apporx. 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



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	215	mA
Repetitive Peak Forward Current at $T_A = 25^\circ\text{C}$	I_{FRM}	450	mA
Surge Forward Current at $t_p < 1$ ms, at $T_A = 25^\circ\text{C}$	I_{FSM}	1000	mA
Total Power Dissipation	P_D	250	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to + 150	$^\circ\text{C}$

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

CHARACTERISTICS	SYMBOL	Value	Unit	Testing Condition
Reverse Breakdown Voltage	V(BR)R	70	V	Ir=100uA
Forward Voltage	VF(1)	715	mV	If=1mA
	VF(2)	855	mV	If=10mA
	VF(3)	1000	mV	IF=50mA
	VF(4)	1250	mV	If=150mA
Reverse Current	I _R	2.5	uA	Vr=70V
Total Capacitance	C _T	1.5	pF	Vr=0V,F=1MHZ
Reverse Recovery Time	T _{rr}	6	nS	If=Ir=10mA,RL=100 ohm, measured at ir=1mA

CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT
& FORWARD VOLTAGE

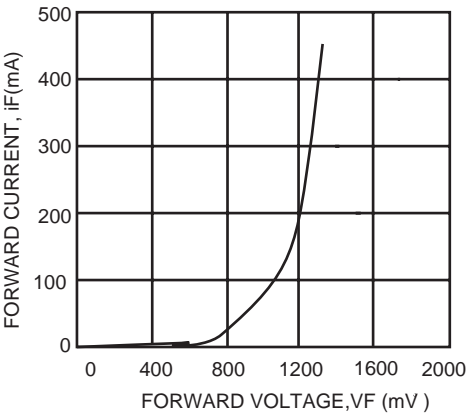


FIG. 2 - DIODE CAPACITANCE

