

SCHOTTKY BARRIER DIODE

FEATURES

- * Very low turn-on voltage
- * Fast switching
- * For protecting the P/N junction guard ring against excessive voltage, such as electrostatic dis-charges
- * Surface mounting device

MECHANICAL DATA

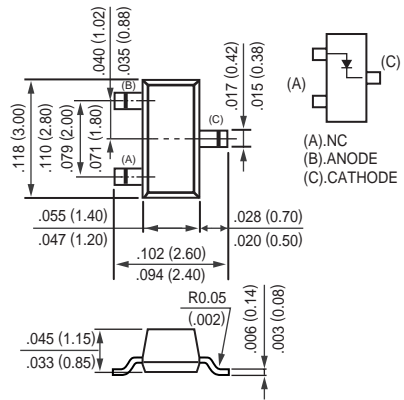
- * Epoxy : Device has UL flammability classification 94V-0
- * Weight : approx. 0.008g

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 TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	BAT54	UNITS
Repetitive Peak Reverse Voltage	V _{RRM}	30	Volts
Forward Continuous Current	I _F	200	mA
Repetitive Peak Forward Current	I _{FRM}	300	mA
Surge Forward Current	I _{FSM}	600	mA
Total Power Dissipation	P _D	230	m W
Junction Temperature	T _J	125	°C
Storage Temperature Range	T _{STG}	-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	30	V	Ir=10uA
Forward Voltage	VF(1)	240	mV	If=0.1mA
	VF(2)	320	mV	If=1mA
	VF(3)	400	mV	If=10mA
	VF(4)	500	mV	If=30mA
	VF(5)	1000	mV	If=100mA
Reverse Current	I _R	2.0	uA	Vr=25V
Total Capacitance	C _T	10	pF	Vr=1V, f=1MHZ
Reverse Recovery Time	T _{rr}	5	nS	If=Ir=10mA, RL=100 ohm, measured at ir=1mA

CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT & FORWARD VOLTAGE

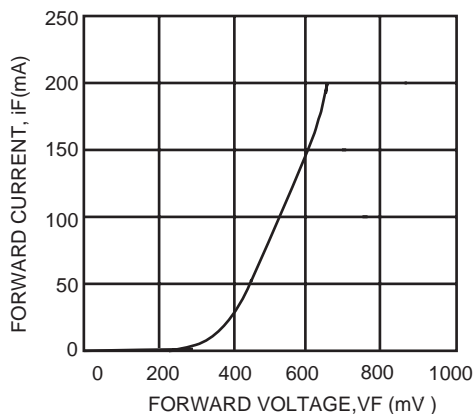


FIG. 2 - DIODE CAPACITANCE

