CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY BARRIER DIODE

VOLTAGE 30 Volts CURRENT 0.2 Ampere

BAT54WCPT

Lead free devices

APPLICATION

* Ultra high speed switching

FEATURE

* Small surface mounting type. (SC-70/SOT-323)
* High speed. (T_{RR}=2.5nSec Typ.)
* Suitable for high packing density.
* Maximum total power disspation is 200mW.
* Peak forward current is 300mA.

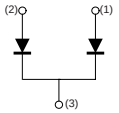
CONSTRUCTION

* Silicon epitaxial planar

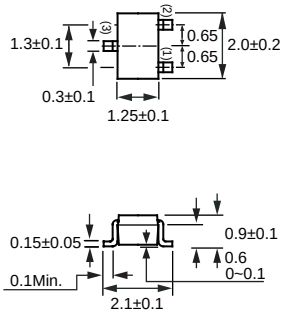
MARKING

* 3I

CIRCUIT



SC-70/SOT-323



Dimensions in millimeters

SC-70/SOT-323

MAXIMUM RATINGES (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	BAT54WCPT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	Volts
Maximum RMS Voltage	V_{RMS}	21	Volts
Maximum DC Blocking Voltage	V_{DC}	30	Volts
Maximum Average Forward Rectified Current	I_O	0.2	Amps
Peak Forward Surge Current at 1Sec.	I_{FSM}	0.6	Amps
Typical Junction Capacitance between Terminal (Note 1)	C_J	10	pF
Maximum Reverse Recovery Time (Note 2)	T_{RR}	5.0	nSec
Maximum Operating Temperature Range	T_J	+150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

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

CHARACTERISTICS		SYMBOL	BAT54WCPT	UNITS
Maximum Instantaneous Forward Voltage	@ I_F= 0.1 mA @ I_F= 1.0 mA @ I_F= 10 mA @ I_F= 30 mA @ I_F= 100 mA	V_F	240 320 400 500 1000	mVolts
Maximum Average Reverse Current at V_R= 25V		I_R	2.0	uAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 1.0 volts.
2. Measured at applied froward current of 10mA and reverse current of 10mA .
3. ESD sensitive product handling required.

2002-8

RATING CHARACTERISTIC CURVES (BAT54WCPT)

FIG. 1 - FORWARD CHARACTERISTICS

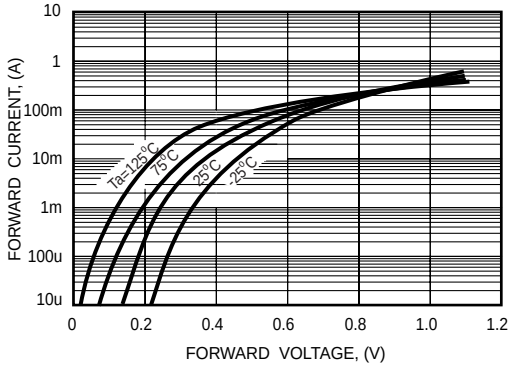


FIG. 2 - REVERSE CHARACTERISTICS

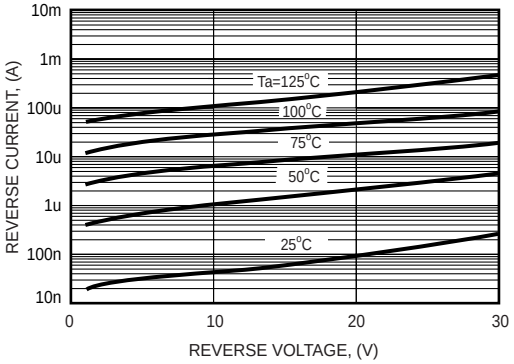


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

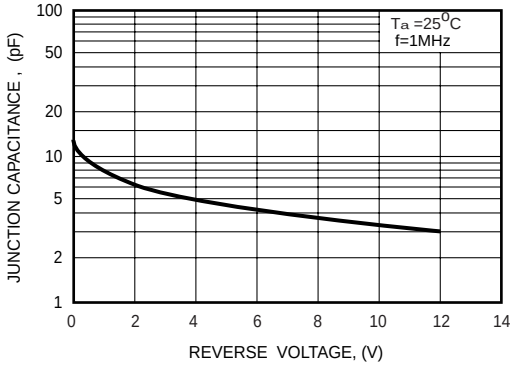


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE