CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY DIODE

VOLTAGE 30 Volts CURRENT 0.2 Ampere

BAT54PT

Lead free devices

APPLICATION

* Ultra high speed switching

FEATURE

* Small surface mounting type. (SOT-23)
* High speed. (T_{RR}=2.5nSec Typ.)
* Suitable for high packing density.
* Maximum total power disspation is 230mW.
* Peak forward current is 300mA.

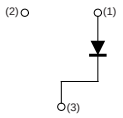
CONSTRUCTION

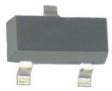
* Silicon epitaxial planar

MARKING

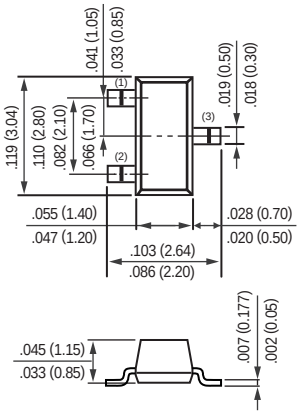
* LV4

CIRCUIT





SOT-23



Dimensions in inches and (millimeters)

SOT-23

RATINGS	SYMBOL	BAT54PT	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
Typical Case Resistance (Note 1)	$R_{\theta JC}$	307	°C / W
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	354	°C / W
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	BAT54PT	UNITS
Maximum Instantaneous Forward Voltage at I_F= 100mA	V_F	1.0	Volts
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.Thermal Resistance (Junction to Lead) : PC Board Mounted on 0.2 X 0.2" (5 X 5mm) copper pad area.

RATING CHARACTERISTIC CURVES (BAT54PT)

FIG. 1 - FORWARD CHARACTERISTICS

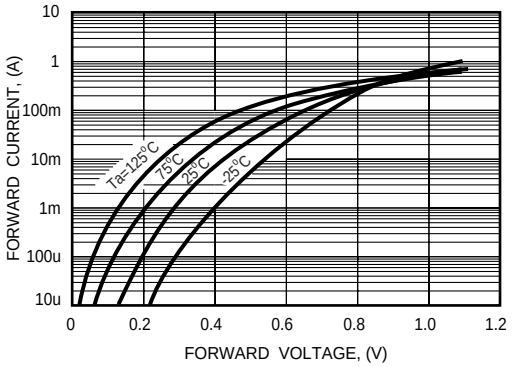


FIG. 2 - REVERSE CHARACTERISTICS

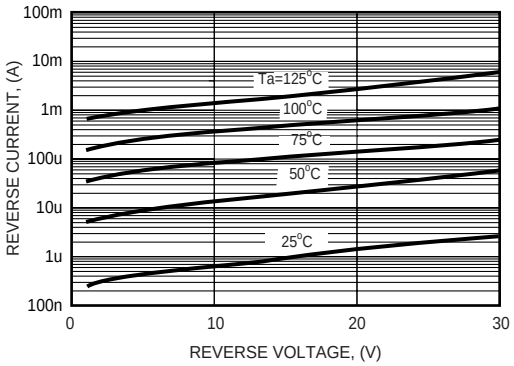


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

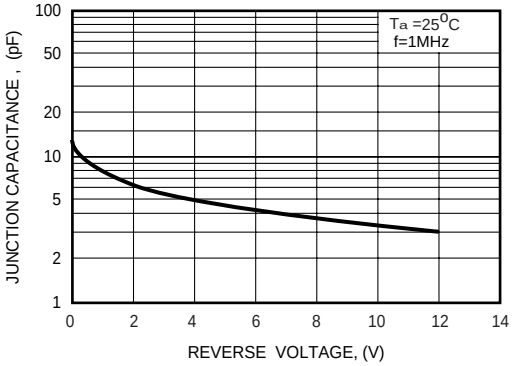


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE