



CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY DIODE

VOLTAGE 30 Volts CURRENT 0.2 Ampere

BAT54VPT

Lead free devices

APPLICATION

- * Ultra high speed switching

FEATURE

- * Small surface mounting type. (SOT-563)
- * High speed. ($T_{RR}=2.5\text{nSec}$ Typ.)
- * Suitable for high packing density.
- * Maximum total power dissipation is 150mW.

CONSTRUCTION

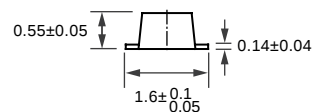
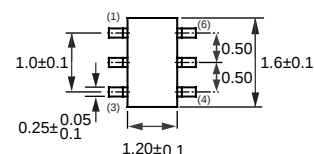
- * Silicon epitaxial planar

MARKING

- * 1V



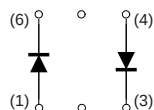
SOT-563



Dimensions in millimeters

SOT-563

CIRCUIT



RATINGS	SYMBOL	BAT54VPT	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 $T_A = 25^{\circ}\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	BAT54VPT	UNITS
Maximum Instantaneous Forward Voltage at $I_F = 100\text{mA}$	V_F	1.0	Volts
Maximum Average Reverse Current at $V_R = 25\text{V}$	I_R	2.0	uAmps

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

2004-07

RATING CHARACTERISTIC CURVES (BAT54VPT)

FIG. 1 - FORWARD CHARACTERISTICS

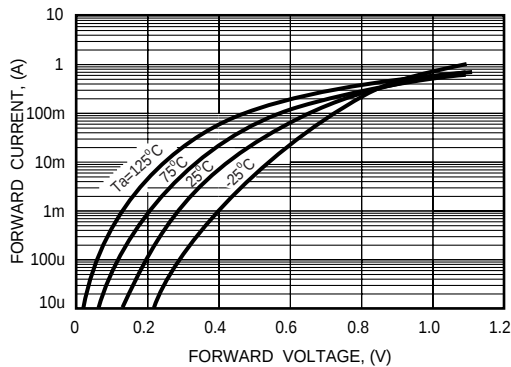


FIG. 2 - REVERSE CHARACTERISTICS

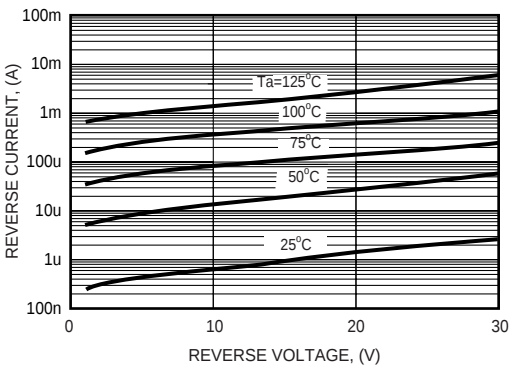


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

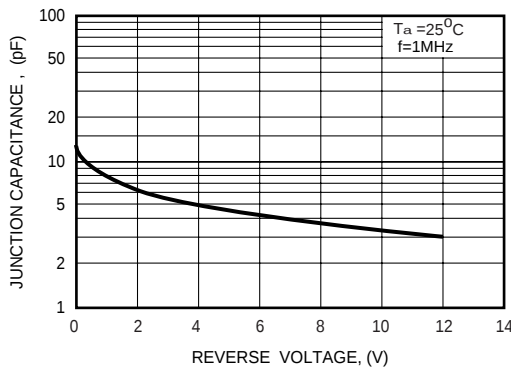


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

