CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT
SCHOTTKY DIODE

VOLTAGE 30 Volts CURRENT 200 mAmperes

BAT54TSPT

Lead free devices

APPLICATION
* Ultra high speed switching

FEATURE
* Small surface mounting type. (SC-75/SOT-416)
* High speed. (T_{RR}=2.5nSec Typ.)
* Suitable for high packing density.
* Maximum total power disspation is 150mW.
* Peak forward current is 300mA.

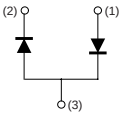
CONSTRUCTION
* Silicon epitaxial planar

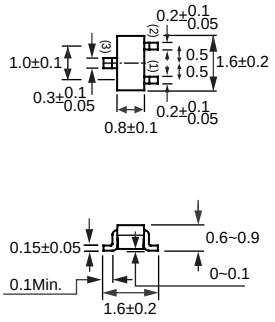
WEIGHT
* 0.002 grams (Approx.)

MARKING
* TV

SC-75/SOT-416

CIRCUIT





Dimensions in millimeters

SC-75/SOT-416

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

RATINGS	SYMBOL	BAT54TSPT	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	200	mAmps
Peak Forward Surge Current at 1Sec.	I_{FSM}	600	mAmps
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	BAT54TSPT	UNITS
Maximum Instantaneous Forward Voltage	@ I_F= 0.1mA @ I_F= 1.0mA @ I_F= 10.0mA @ I_F= 30.0mA @ I_F= 100mA	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.

2003-9

RATING CHARACTERISTIC CURVES (BAT54TSPT)

FIG. 1 - FORWARD CHARACTERISTICS

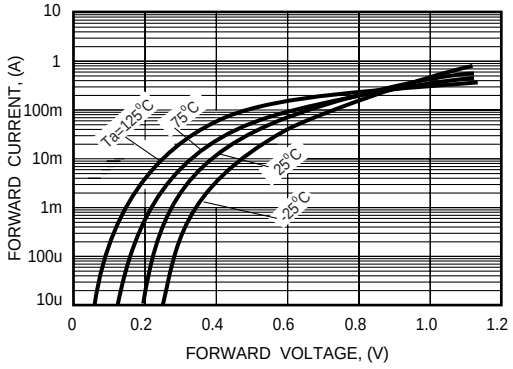


FIG. 2 - REVERSE CHARACTERISTICS

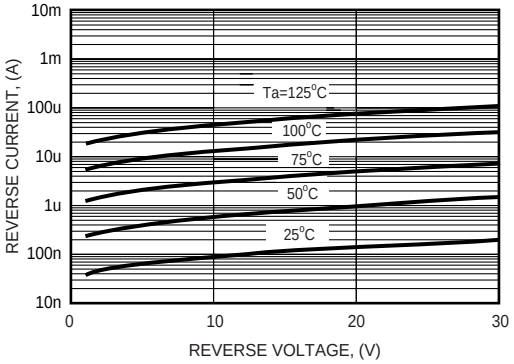


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

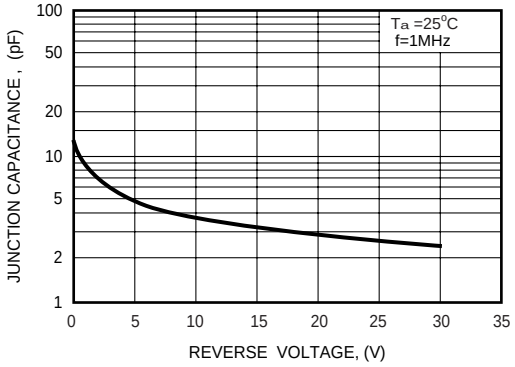


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE