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

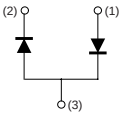
WEIGHT
* 0.002 grams (Approx.)

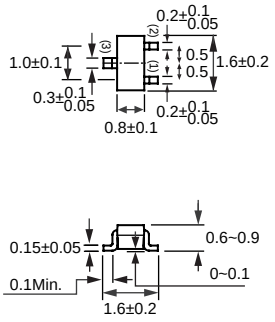
MARKING
* TV



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.

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RATING CHARACTERISTIC CURVES (BAT54TSPT)

FIG. 1 - FORWARD CHARACTERISTICS

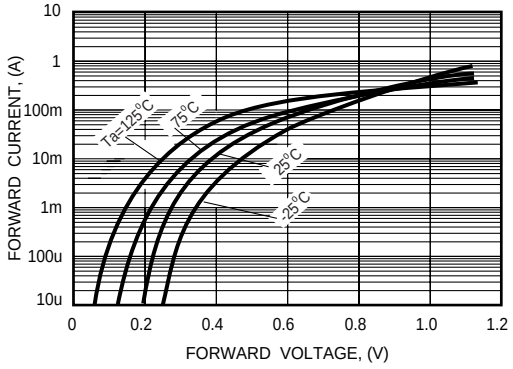


FIG. 2 - REVERSE CHARACTERISTICS

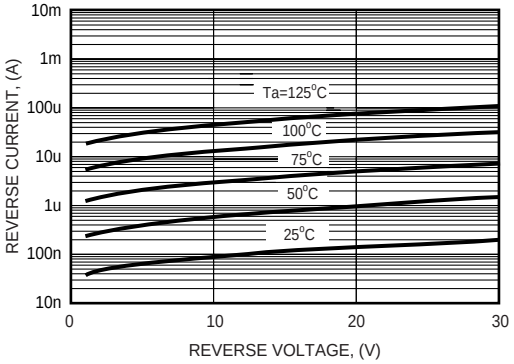


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

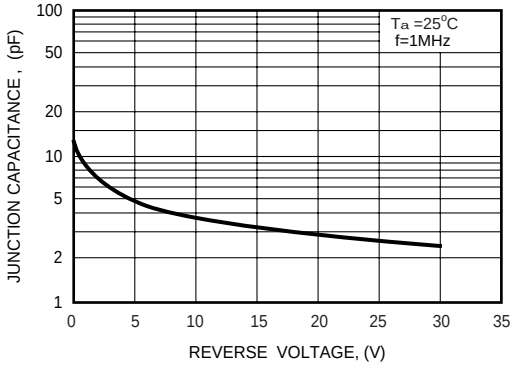


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

