



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SURFACE MOUNT
SCHOTTKY BARRIER DIODE
VOLTAGE 30 Volts CURRENT 0.2 Ampere

BAT54WSPT

APPLICATION

- * Ultra high speed switching

FEATURE

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

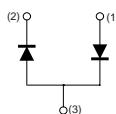
CONSTRUCTION

- * Silicon epitaxial planar

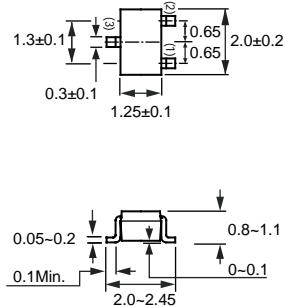
MARKING

- * 3J

CIRCUIT



SC-70/SOT-323



Dimensions in millimeters

SC-70/SOT-323

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	BAT54WSPT	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 TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	BAT54WSPT	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 forward current of 10mA and reverse current of 10mA .
 3. ESD sensitive product handling required.

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RATING CHARACTERISTIC CURVES (BAT54WSPT)

FIG. 1 - FORWARD CHARACTERISTICS

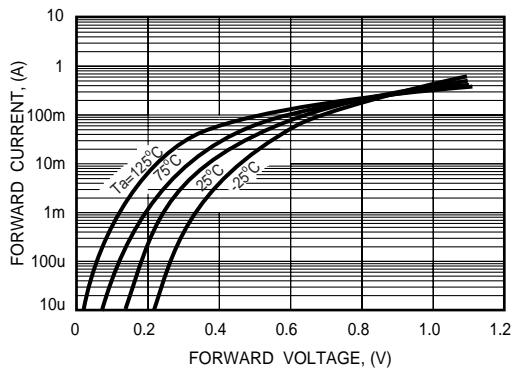


FIG. 2 - REVERSE CHARACTERISTICS

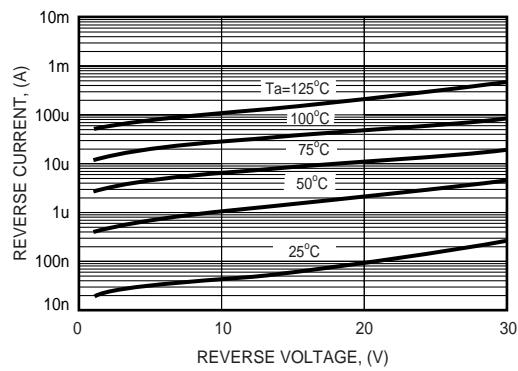


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

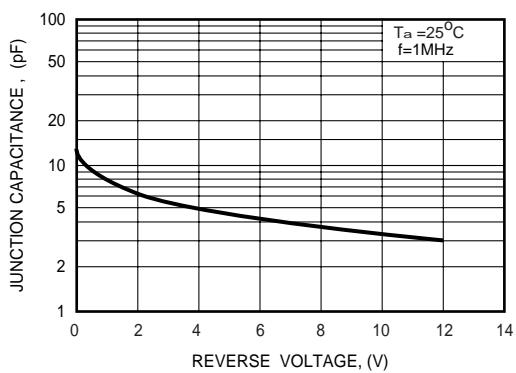


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

