



CHENMKO ENTERPRISE CO.,LTD

BAT54SPT

SURFACE MOUNT SCHOTTKY DIODE

VOLTAGE 30 Volts CURRENT 0.2 Ampere

Lead free devices

APPLICATION

- * Ultra high speed switching

FEATURE

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

CONSTRUCTION

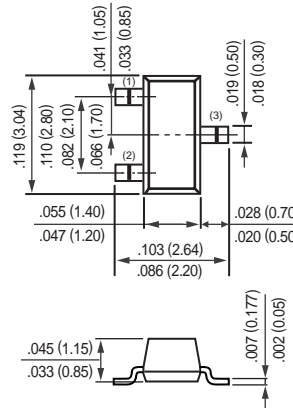
- * Silicon epitaxial planar

MARKING

- * LD3



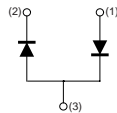
SOT-23



Dimensions in inches and (millimeters)

SOT-23

CIRCUIT



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

RATINGS	SYMBOL	BAT54S	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	30	Volts
Maximum RMS Voltage	VRMS	21	Volts
Maximum DC Blocking Voltage	VDC	30	Volts
Maximum Average Forward Rectified Current	Io	0.2	Amps
Peak Forward Surge Current at 1Sec.	IFSM	0.6	Amps
Typical Junction Capacitance between Terminal (Note 1)	CJ	10	pF
Maximum Reverse Recovery Time (Note 2)	TRR	5.0	nSec
Maximum Operating Temperature Range	TJ	+150	°C
Storage Temperature Range	TSTG	-55 to +150	°C
Thermal Resistance, Junction to Ambient Air (Note 3)	RθJA	500	°C/W

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	BAT54S	UNITS
Maximum Instantaneous Forward Voltage at IF= 100mA	VF	1.0	Volts
Maximum Average Reverse Current at VR= 25V	IR	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. Part mounted on FR-4 board with recommended pad layout.
 4. ESD sensitive product handling required.

RATING CHARACTERISTIC CURVES (BAT54SPT)

FIG. 1 - FORWARD CHARACTERISTICS

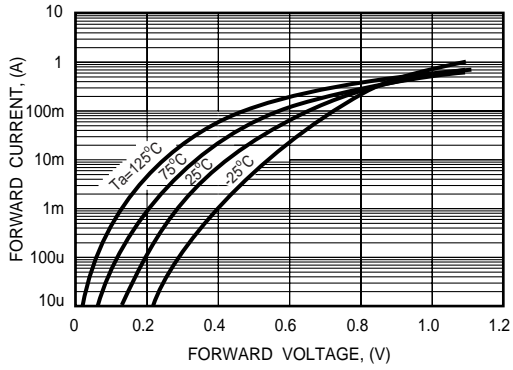


FIG. 2 - REVERSE CHARACTERISTICS

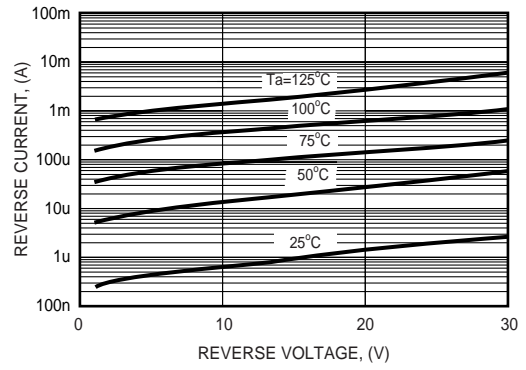


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

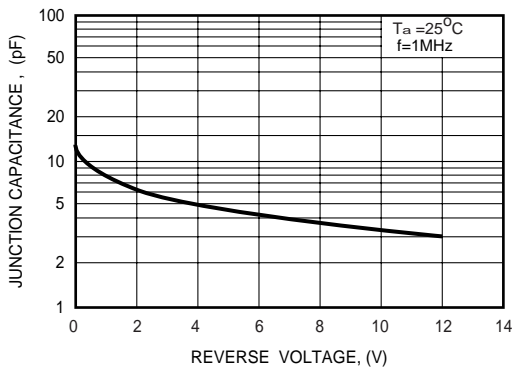


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

