



**CHENMKO ENTERPRISE CO.,LTD**

**SURFACE MOUNT**

**SCHOTTKY BARRIER DIODE**

**VOLTAGE 30 Volts CURRENT 0.2 Ampere**

**BAT54WSPT**

*Lead free devices*

**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**

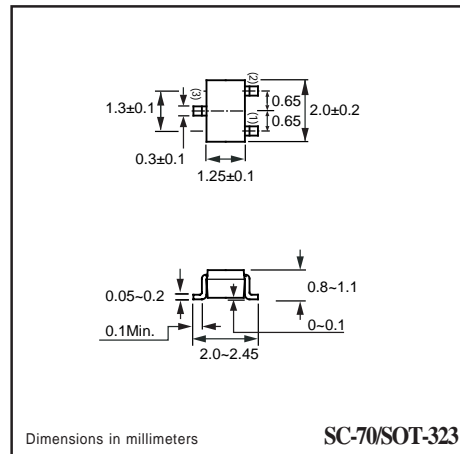
\* Silicon epitaxial planar

**MARKING**

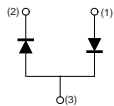
\* 3J



SC-70/SOT-323



**CIRCUIT**



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

RATINGS	SYMBOL	BAT54WSPT	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

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

CHARACTERISTICS	SYMBOL	BAT54WSPT	UNITS
Maximum Instantaneous Forward Voltage	VF	@ If= 0.1 mA	240
		@ If= 1.0 mA	320
		@ If= 10 mA	400
		@ If= 30 mA	500
		@ If= 100 mA	1000
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. ESD sensitive product handling required.

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## RATING CHARACTERISTIC CURVES ( BAT54WSPT )

FIG. 1 - FORWARD CHARACTERISTICS

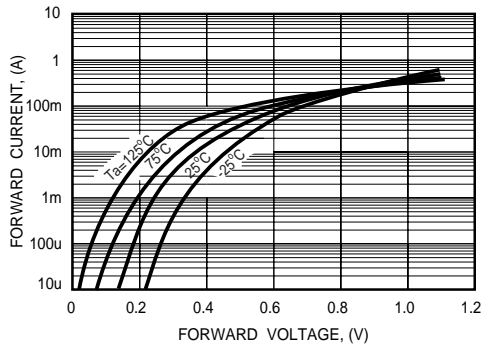


FIG. 2 - REVERSE CHARACTERISTICS

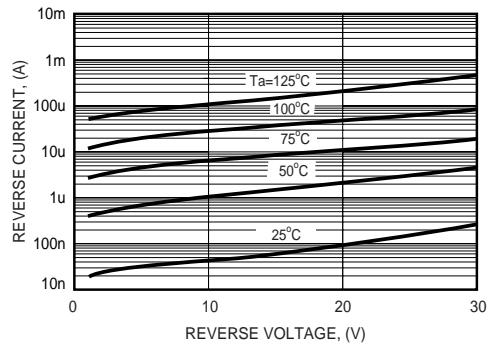


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

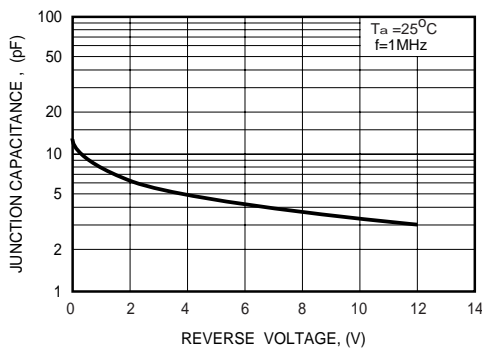


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

