



CHENMKO ENTERPRISE CO.,LTD

BAT54WSGP

SURFACE MOUNT

SCHOTTKY BARRIER DIODE

VOLTAGE 30 Volts CURRENT 0.2 Ampere

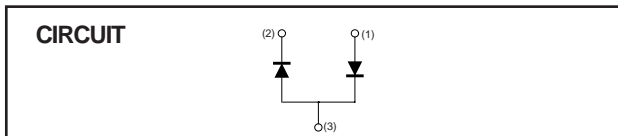
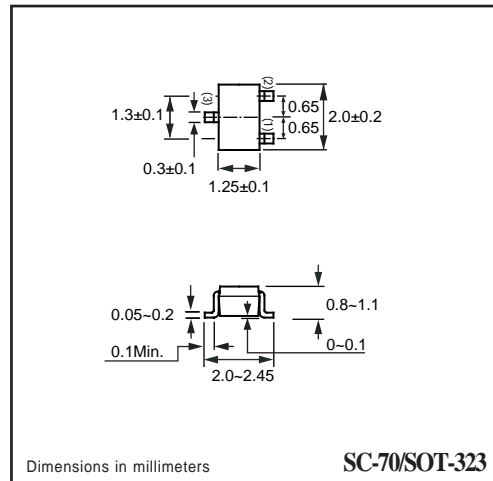
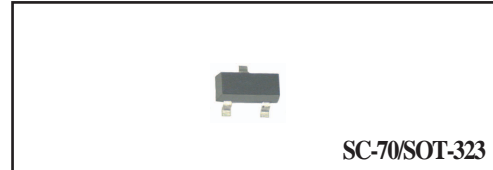
Halogens free devices

APPLICATION
 * Ultra high speed switching

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

CONSTRUCTION
 * Silicon epitaxial planar

MARKING
 * 3J



MAXIMUM RATINGS (At $T_A = 25^{\circ}C$ unless otherwise noted)

RATINGS	SYMBOL	BAT54WSGP	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	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^{\circ}C$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	BAT54WSGP	UNITS
Maximum Instantaneous Forward Voltage	V_F	@ $I_F = 0.1$ mA	240
		@ $I_F = 1.0$ mA	320
		@ $I_F = 10$ mA	400
		@ $I_F = 30$ mA	500
		@ $I_F = 100$ mA	1000
Maximum Average Reverse Current at $V_R = 25V$	I_R	2.0	μA

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.

RATING CHARACTERISTIC CURVES (BAT54WSGP)

FIG. 1 - FORWARD CHARACTERISTICS

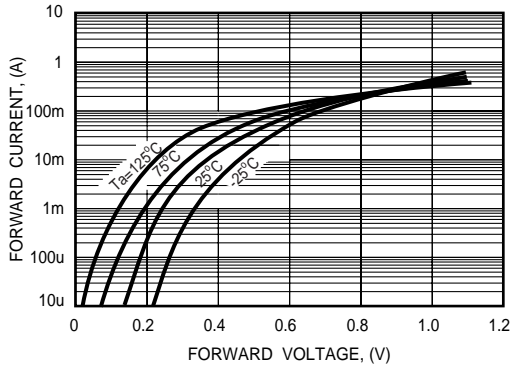


FIG. 2 - REVERSE CHARACTERISTICS

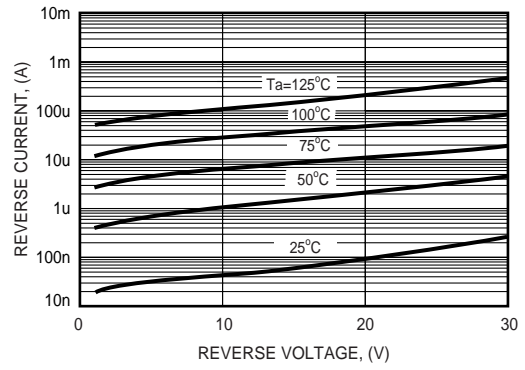


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

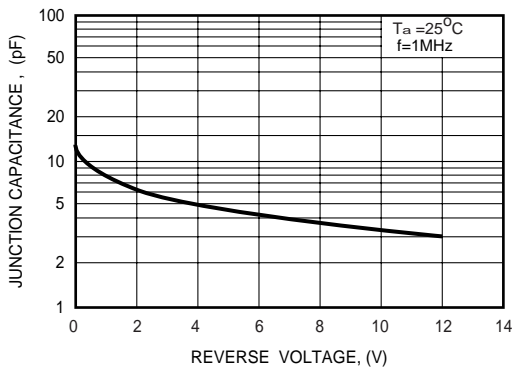


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

