



# CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

## SURFACE MOUNT SCHOTTKY DIODE

VOLTAGE 30 Volts CURRENT 0.2 Ampere

**BAT43BGP**

### APPLICATION

- \* Ultra high speed switching

### FEATURE

- \* Small surface mounting type. (SOD-123)
- \* High speed. ( $T_{RR}=5.0nSec$  Typ.)
- \* Suitable for high packing density.
- \* Maximum total power dissipation is 200mW.
- \* Peak forward current is 500mA at  $t_{im}<1.0sec$ .

### CONSTRUCTION

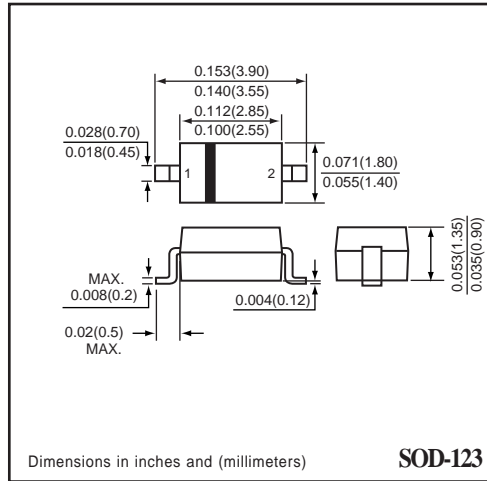
- \* Silicon epitaxial planar

### MARKING

- \* BT2



SOD-123



### CIRCUIT



RATINGS	SYMBOL	BAT43BGP	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 $<10mSec$ .	$I_{FSM}$	4.0	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	$T_J$	+125	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +125	$^{\circ}C$

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

CHARACTERISTICS	SYMBOL	BAT43BGP	UNITS
Maximum Instantaneous Forward Voltage $I_F = 2.0mA$ $I_F = 15mA$ $I_F = 200mA$	$V_F$	330 450 1000	mVolts
Maximum Average Reverse Current at $V_R = 25V$	$I_R$	0.5	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.

## RATING CHARACTERISTIC CURVES ( BAT43BGP )

FIG. 1 - FORWARD CHARACTERISTICS

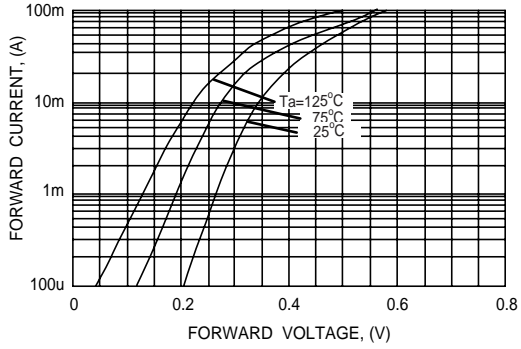


FIG. 2 - REVERSE CHARACTERISTICS

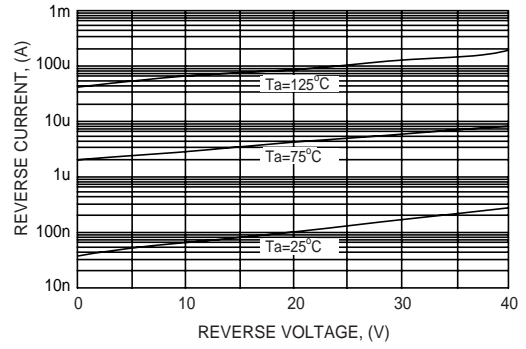


FIG. 3 - TYPICAL FORWARD CURRENT DERATING CURVE

