



# CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

## SURFACE MOUNT SCHOTTKY DIODE

VOLTAGE 40 Volts CURRENT 0.2 Ampere

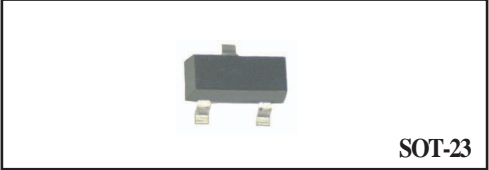
**BAS40GP**

**APPLICATION**  
\* Ultra high speed switching

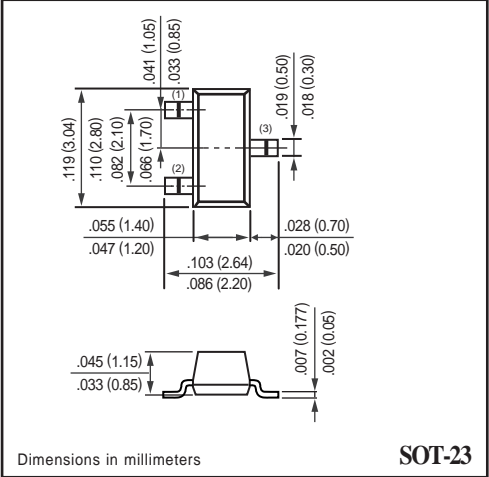
**FEATURE**  
\* Small surface mounting type. (SOT-23)  
\* High speed. ( $T_{RR}=2.5nSec$  Typ.)  
\* Suitable for high packing density.  
\* Maximum total power dissipation is 200mW.  
\* Peak forward current is 300mA.

**CONSTRUCTION**  
\* Silicon epitaxial planar

**WEIGHT**  
\* 0.006 grams ( Approx.)

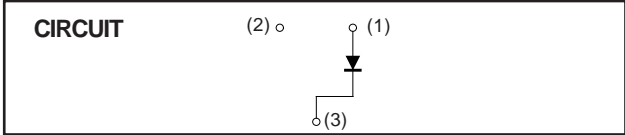


SOT-23



Dimensions in millimeters

SOT-23



RATINGS	SYMBOL	BAS40GP	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	Volts
Maximum RMS Voltage	$V_{RMS}$	28	Volts
Maximum DC Blocking Voltage	$V_{DC}$	40	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)	$C_J$	5.0	pF
Maximum Reverse Recovery Time (Note 2)	$T_{RR}$	5.0	nSec
Maximum Operating Temperature Range	$T_J$	-55 to +125	°C
Storage Temperature Range	$T_{STG}$	-65 to +150	°C

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

CHARACTERISTICS	SYMBOL	BAS40GP	UNITS
Maximum Instantaneous Forward Voltage	@ $I_F = 1.0mA$	380	mVolts
	@ $I_F = 40mA$	1000	
Maximum Average Reverse Current at $V_R = 30V$	$I_R$	200	nAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 0.0 volts.  
2. Measured at applied forward current of 10mA and reverse current of 10mA.  
3. ESD sensitive product handling required.

## RATING CHARACTERISTIC CURVES ( BAS40GP )

FIG. 1 - FORWARD CHARACTERISTICS

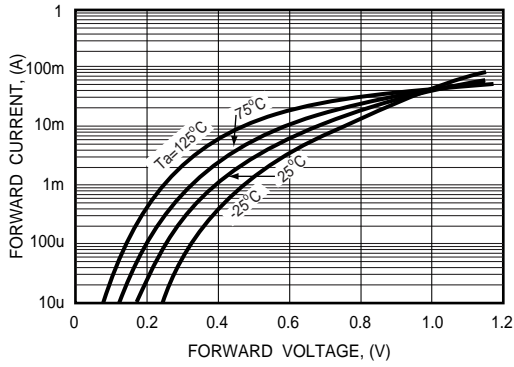


FIG. 2 - REVERSE CHARACTERISTICS

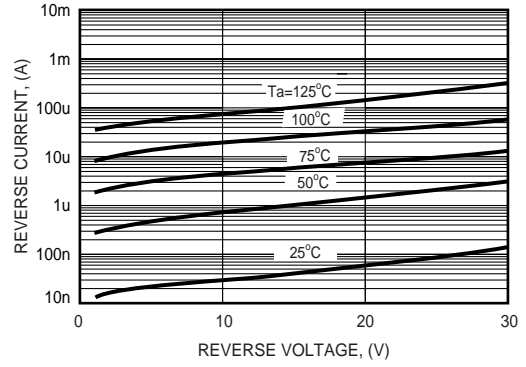


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

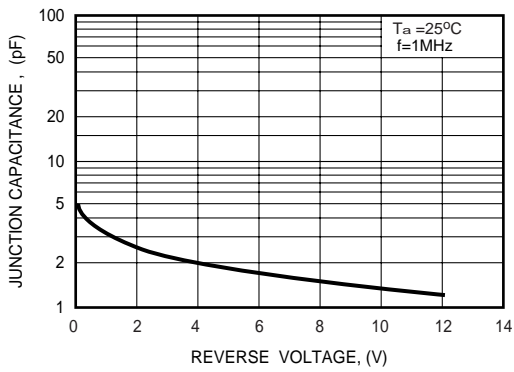


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

