



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

**SURFACE MOUNT
SWITCHING DIODE**

VOLTAGE 100 Volts CURRENT 0.25 Ampere

BAS316GP

APPLICATION

* Ultra high speed switching

FEATURE

- * Small surface mounting type. (SC-76/SOD-323)
- * High speed. (TRR=1.5nSec Typ.)
- * Suitable for high packing density.
- * Maximum total power dissipation is 225mW.

CONSTRUCTION

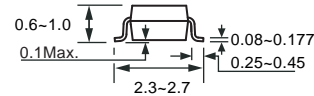
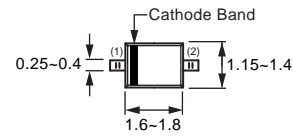
* Silicon epitaxial planar

MARKING

* Z9



SC-76/SOD-323



Dimensions in millimeters

SC-76/SOD-323

CIRCUIT



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

RATINGS	SYMBOL	BAS316GP	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	100	Volts
Maximum RMS Voltage	VRMS	70	Volts
Maximum DC Blocking Voltage	VDC	75	Volts
Maximum Average Forward Rectified Current	Io	0.25	Amps
Peak Forward Surge Current at 1uSec.	IFSM	4.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	CJ	4.0	pF
Maximum Reverse Recovery Time (Note 2)	TRR	4.0	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	BAS316GP	UNITS
Maximum Instantaneous Forward Voltage at IF= 1mA IF= 10mA IF= 50mA IF= 150mA	VF	0.715 0.855 1.0 1.25	Volts
Maximum Average Reverse Current at VR= 25V VR= 75V	IR	0.03 1.0	uAmps

- NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.
 2. Measured at applied forward current of 10mA and reverse voltage of 6.0 volts.
 3. ESD sensitive product handling required.

RATING CHARACTERISTIC CURVES (BAS316GP)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURRENT

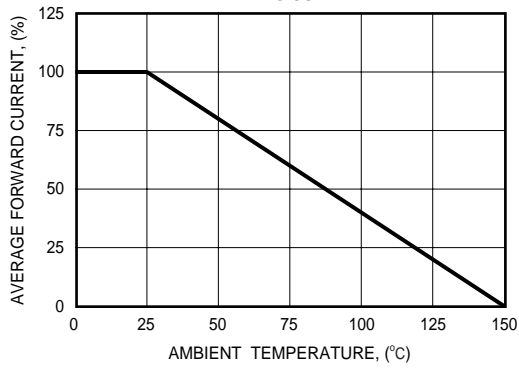


FIG. 2 - FORWARD CHARACTERISTICS

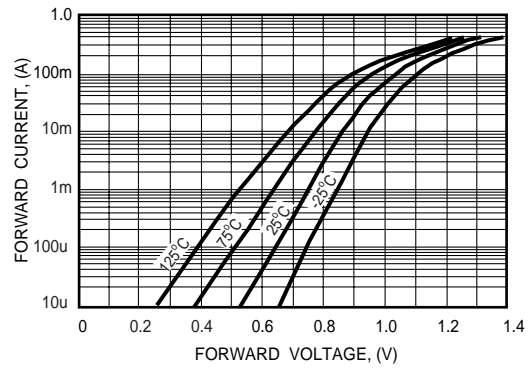


FIG. 3 - REVERSE CHARACTERISTICS

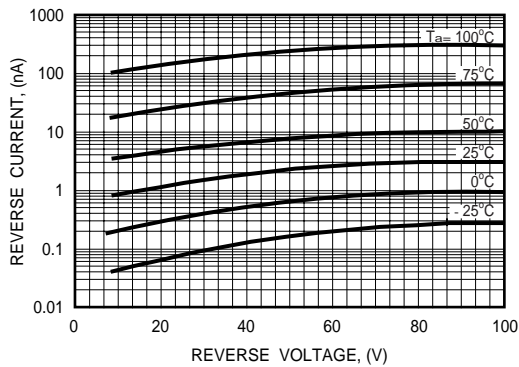


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

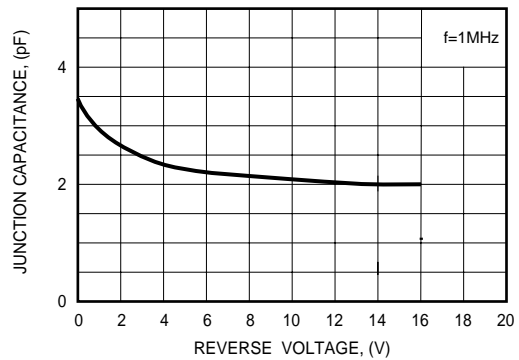


FIG. 5 - REVERSE RECOVERY TIME

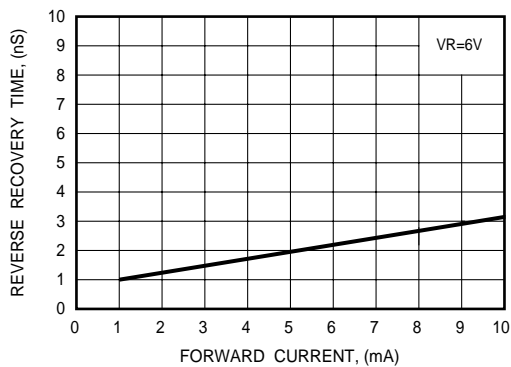


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

