



# CHENMKO ENTERPRISE CO.,LTD

**BAS16VPT**

## SURFACE MOUNT SWITCHING DIODE

VOLTAGE 100 Volts CURRENT 0.15 Ampere

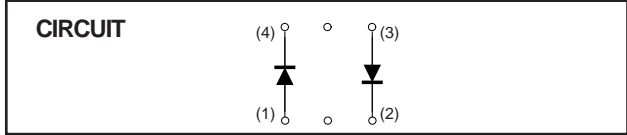
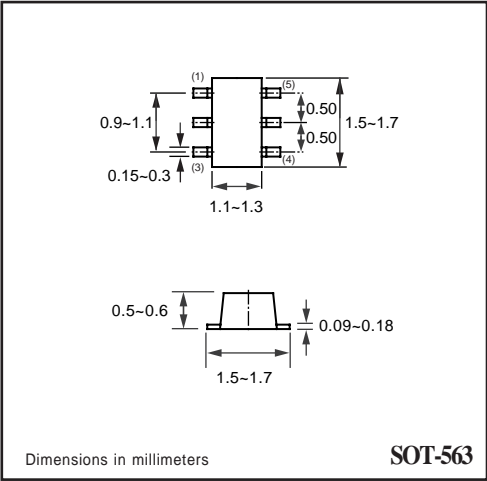
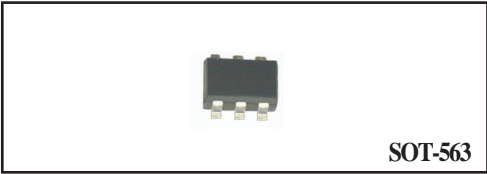
Lead free devices

**APPLICATION**  
\* Ultra high speed switching

**FEATURE**  
\* Small surface mounting type. (SOT-563)  
\* High speed. (TRR=1.5nSec Typ.)  
\* Suitable for high packing density.  
\* Maximum total power dissipation is 150mW.  
\* Peak forward current is 150mA.

**CONSTRUCTION**  
\* Silicon epitaxial planar

**MARKING**  
\*4V



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

RATINGS	SYMBOL	BAS16VPT	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	0.15	Amps
Peak Forward Surge Current at 1uSec.	IFSM	4.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	CJ	1.5	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	BAS16VPT	UNITS
Maximum Instantaneous Forward Voltage at If= 150mA	VF	1.25	Volts
Maximum Average Reverse Current at VR= 75V	IR	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 10.0 volts.  
3. ESD sensitive product handling required.

## RATING CHARACTERISTIC CURVES ( BAS16VPT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

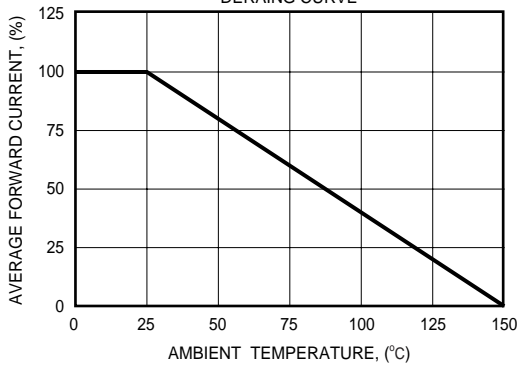


FIG. 2 - FORWARD CHARACTERISTICS

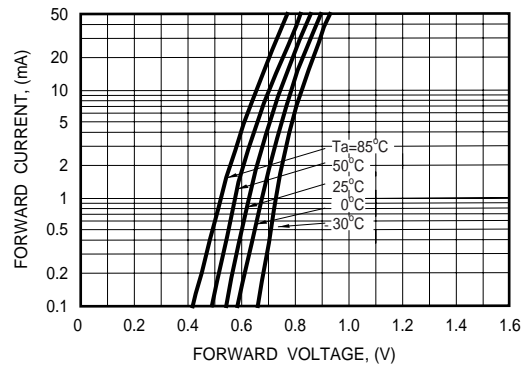


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

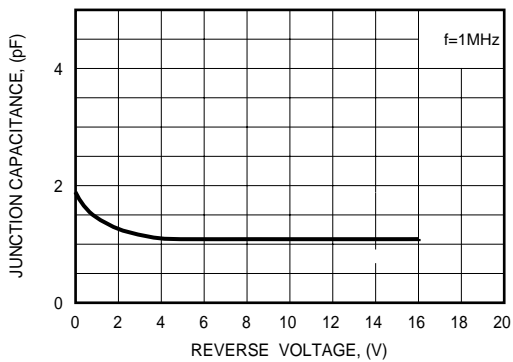


FIG. 4 - REVERSE CHARACTERISTICS

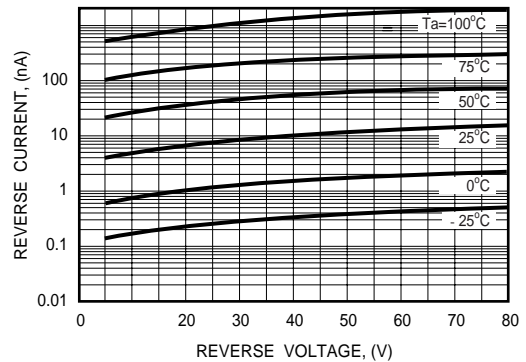


FIG. 5 - REVERSE RECOVERY TIME

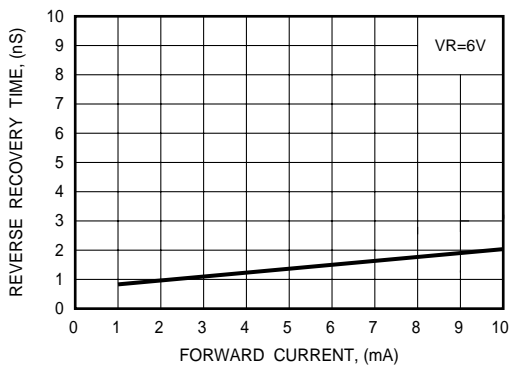


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

