CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SWITCHING DIODE

VOLTAGE 100 Volts CURRENT 0.15 Ampere

BAS16VPT

Lead free devices

APPLICATION

* Ultra high speed switching

FEATURE

* Small surface mounting type. (SOT-563)
* High speed. (T_{RR}=1.5nSec Typ.)
* Suitable for high packing density.
* Maximum total power disspation is 150mW.
* Peak forward current is 150mA.

CONSTRUCTION

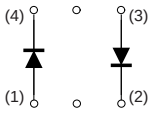
* Silicon epitaxial planar

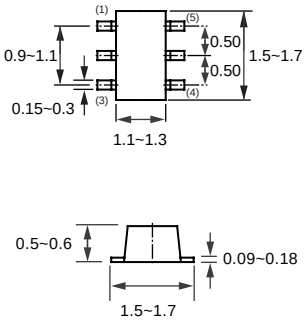
MARKING

*4V

SOT-563

CIRCUIT





Dimensions in millimeters

SOT-563

MAXIMUM RATINGES (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	BAS16VPT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	Volts
Maximum RMS Voltage	V_{RMS}	70	Volts
Maximum DC Blocking Voltage	V_{DC}	75	Volts
Maximum Average Forward Rectified Current	I_O	0.15	Amps
Peak Forward Surge Current at 1uSec.	I_{FSM}	4.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	C_J	1.5	pF
Maximum Reverse Recovery Time (Note 2)	T_{RR}	4.0	nSec
Maximum Operating Temperature Range	T_J	+150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (At T_A = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	BAS16VPT	UNITS
Maximum Instantaneous Forward Voltage at I_F= 150mA	V_F	1.25	Volts
Maximum Average Reverse Current at V_R= 75V	I_R	1.0	uAmps

2004-07

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.
2. Measured at applied froward 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 DERAING CURVE

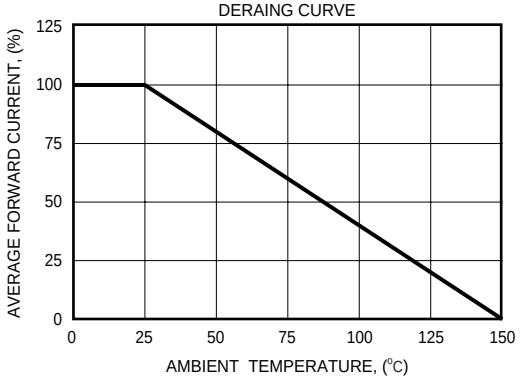


FIG. 2 - FORWARD CHARACTERISTICS

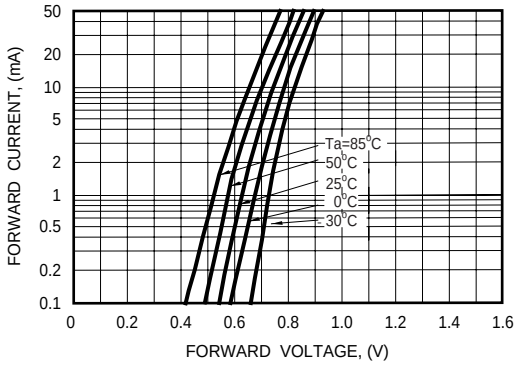


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

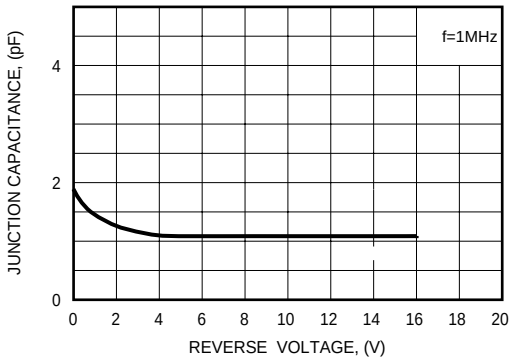


FIG. 4 - REVERSE CHARACTERISTICS

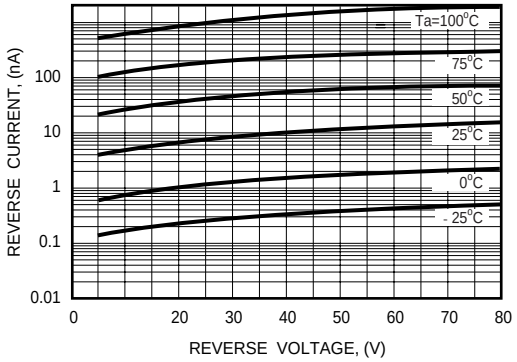


FIG. 5 - REVERSE RECOVERY TIME

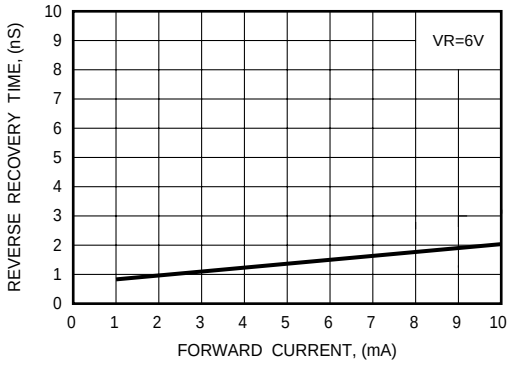


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT