



**CHENMKO ENTERPRISE CO.,LTD**

Lead free devices

**SURFACE MOUNT  
SWITCHING DIODE**

VOLTAGE 75 Volts CURRENT 0.15 Ampere

**BAV70N1PT**

**APPLICATION**

\* Ultra high speed switching

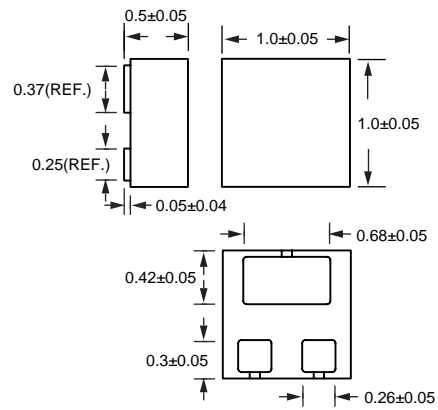
**FEATURE**

- \* Small surface mounting type. (FBPT-923)
- \* High speed. ( $T_{RR}=1.5nSec$  Typ.)
- \* Suitable for high packing density.
- \* Peak forward current is 450mA.
- \* Lead free devices

**CONSTRUCTION**

\* Silicon epitaxial planar

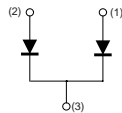
**FBPT-923**



Dimensions in millimeters

**FBPT-923**

**CIRCUIT**



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

RATINGS	SYMBOL	BAV70N1PT	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	75	Volts
Maximum RMS Voltage	$V_{RMS}$	53	Volts
Maximum DC Blocking Voltage	$V_{DC}$	70	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	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}C$

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

CHARACTERISTICS	SYMBOL	BAV70N1PT	UNITS
Maximum Instantaneous Forward Voltage at $I_f = 150mA$	$V_F$	1.25	Volts
Maximum Average Reverse Current at $V_R = 70V$	$I_R$	2.5	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.

2006-07

## RATING CHARACTERISTIC CURVES ( BAV70N1PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

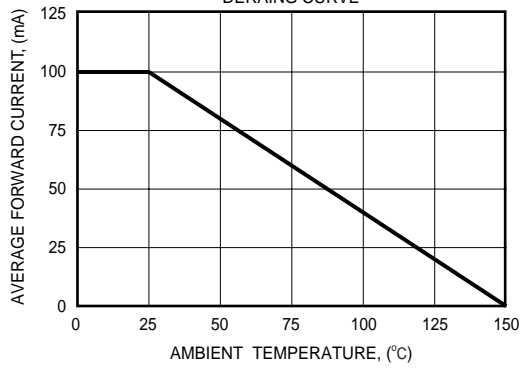


FIG. 2 - FORWARD CHARACTERISTICS

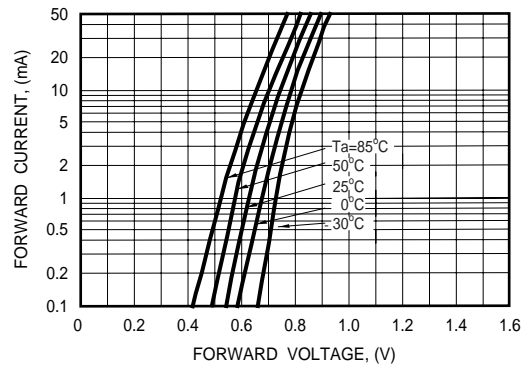


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

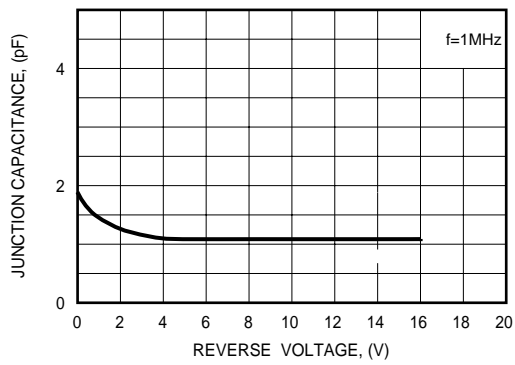


FIG. 4 - REVERSE CHARACTERISTICS

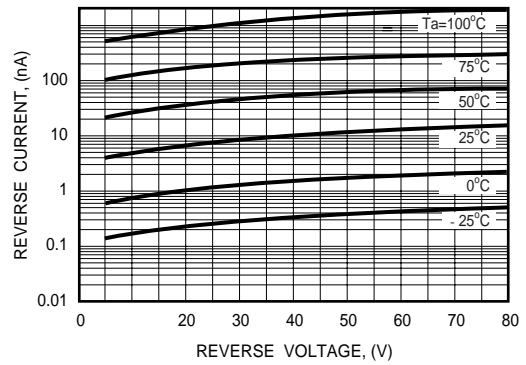


FIG. 5 - REVERSE RECOVERY TIME

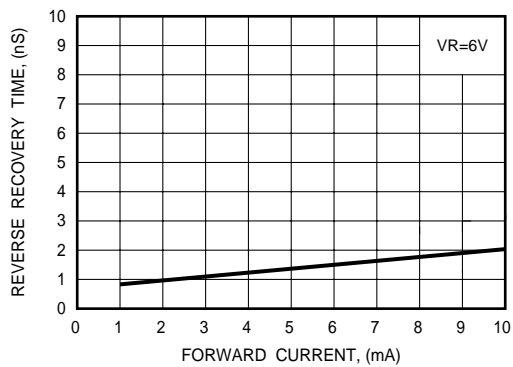


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

