



**CHENMKO ENTERPRISE CO.,LTD**

**BAV99N1PT**

**SURFACE MOUNT  
SWITCHING DIODE**

**VOLTAGE 85 Volts CURRENT 0.15 Ampere**

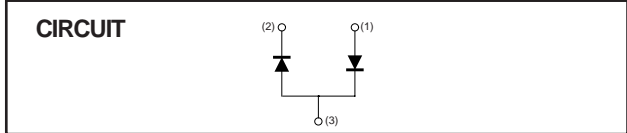
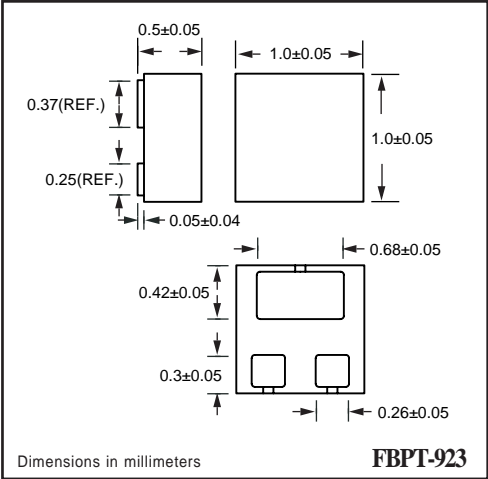
*Lead free devices*

**APPLICATION**  
\* Ultra high speed switching

**FEATURE**  
\* Small surface mounting type. (FBPT-923)  
\* High speed. (TRR=1.5nSec Typ.)  
\* Suitable for high packing density.  
\* Peak forward current is 450mA.

**CONSTRUCTION**  
\* Silicon epitaxial planar

**FBPT-923**



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

| RATINGS  | SYMBOL | BAV99N1PT   | UNITS |
|--|--------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage                 | VRRM   | 85          | Volts |
| Maximum RMS Voltage                                    | VRMS   | 60          | 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 | BAV99N1PT | 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.

2006-07

## RATING CHARACTERISTIC CURVES ( BAV99N1PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

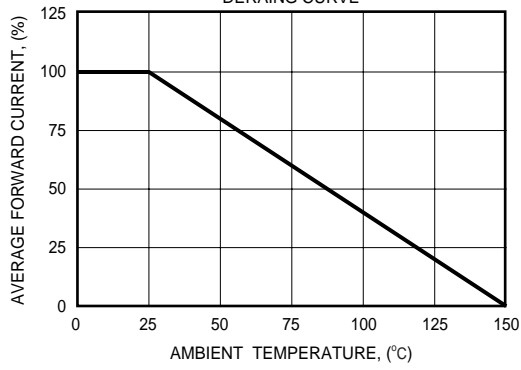


FIG. 2 - FORWARD CHARACTERISTICS

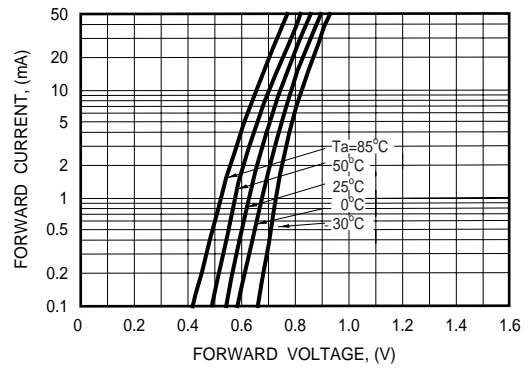


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

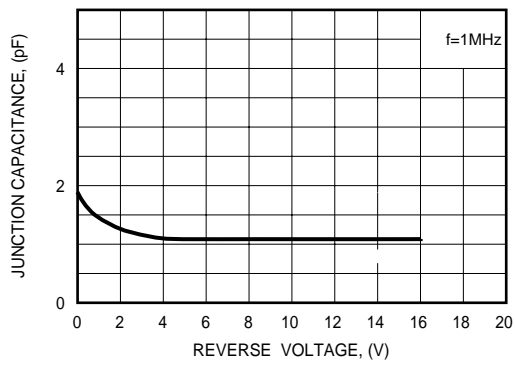


FIG. 4 - REVERSE CHARACTERISTICS

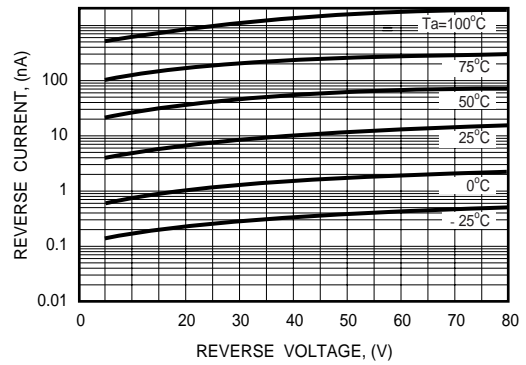


FIG. 5 - REVERSE RECOVERY TIME

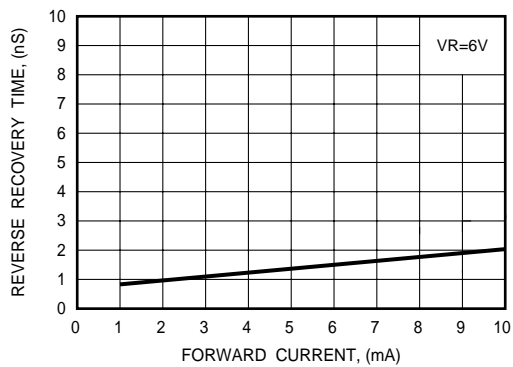


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

