



CHENMKO ENTERPRISE CO.,LTD

BAV99WPT

**SURFACE MOUNT
SWITCHING DIODE**

VOLTAGE 85 Volts CURRENT 0.15 Ampere

Lead free devices

APPLICATION

* Ultra high speed switching

FEATURE

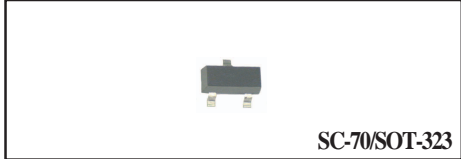
- * Small surface mounting type. (SC-70/SOT-323)
- * High speed. (TRR=1.5nSec Typ.)
- * Suitable for high packing density.
- * Maximum total power dissipation is 300mW.
- * Peak forward current is 450mA.

CONSTRUCTION

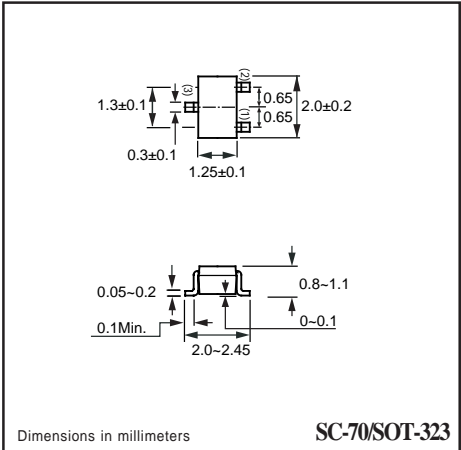
* Silicon epitaxial planar

MARKING

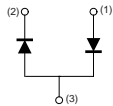
* A7



SC-70/SOT-323



CIRCUIT



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

| RATINGS | SYMBOL | BAV99WPT | 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 | BAV99WPT | 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.

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RATING CHARACTERISTIC CURVES (BAV99WPT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

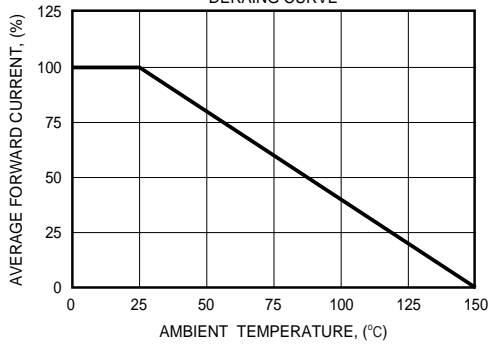


FIG. 2 - FORWARD CHARACTERISTICS

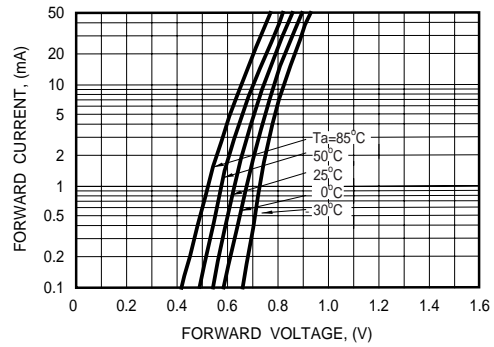


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

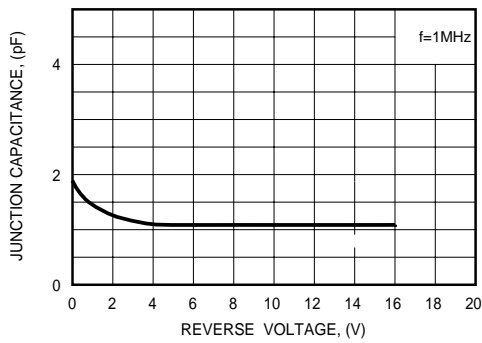


FIG. 4 - REVERSE CHARACTERISTICS

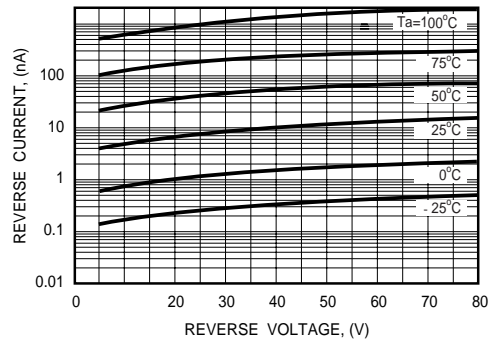


FIG. 5 - REVERSE RECOVERY TIME

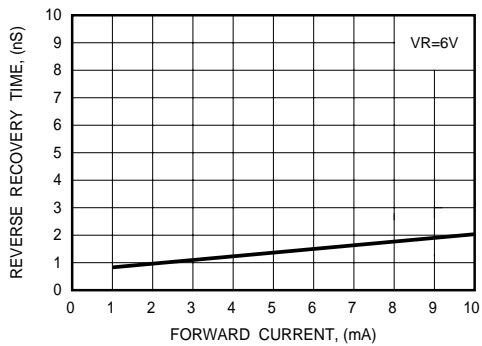


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

