



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT SWITCHING DIODE

VOLTAGE 85 Volts CURRENT 0.15 Ampere

BAV99TGP

APPLICATION

- * Ultra high speed switching

FEATURE

- * Small surface mounting type. (SC-75/SOT-416)
- * High speed. ($T_{RR}=1.5nSec$ Typ.)
- * Suitable for high packing density.
- * Maximum total power dissipation is 300mW.
- * Peak forward current is 450mA.

CONSTRUCTION

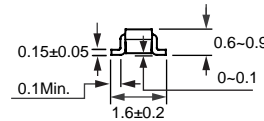
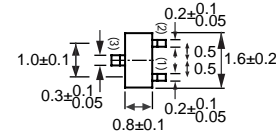
- * Silicon epitaxial planar

MARKING

- * A7



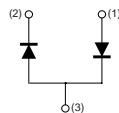
SC-75/SOT-416



Dimensions in millimeters

SC-75/SOT-416

CIRCUIT



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

RATINGS	SYMBOL	BAV99TGP	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	85	Volts
Maximum RMS Voltage	V_{RMS}	60	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	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

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

CHARACTERISTICS	SYMBOL	BAV99TGP	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

- 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 (BAV99TGP)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

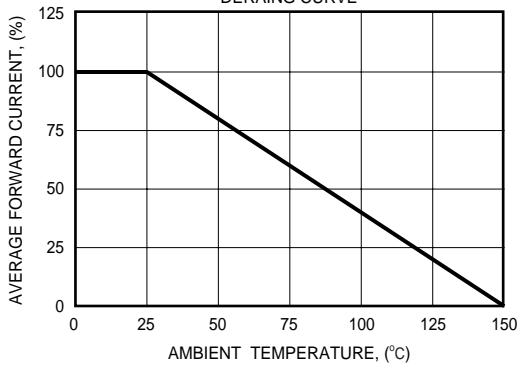


FIG. 2 - FORWARD CHARACTERISTICS

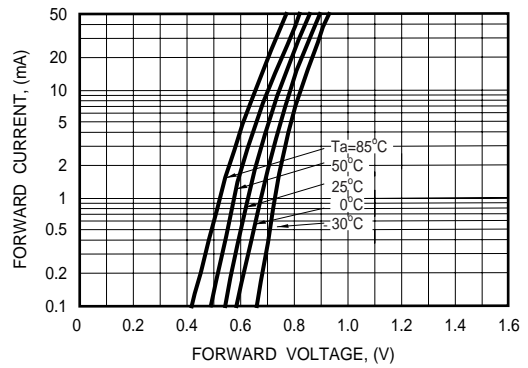


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

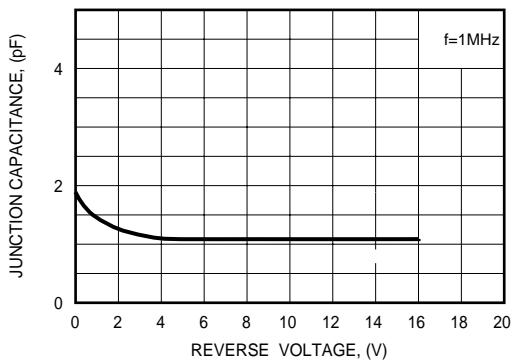


FIG. 4 - REVERSE CHARACTERISTICS

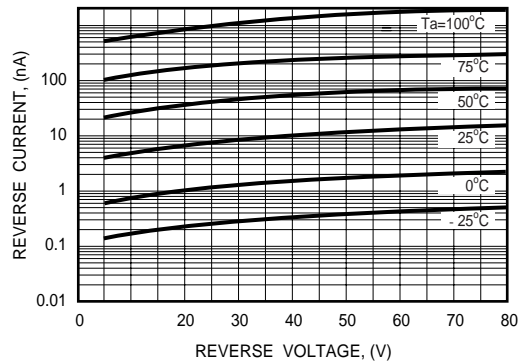


FIG. 5 - REVERSE RECOVERY TIME

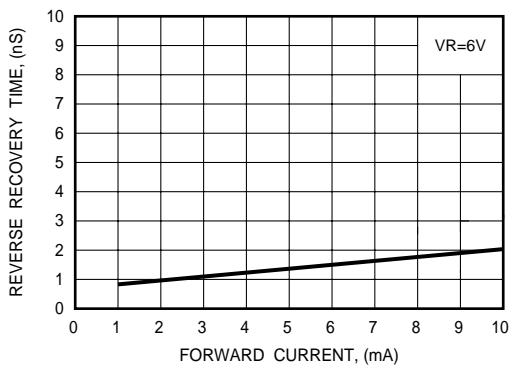


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

