



CHENMKO ENTERPRISE CO.,LTD

**SURFACE MOUNT
SWITCHING DIODE**

VOLTAGE 75 Volts CURRENT 0.15 Ampere

BAV70PT

Lead free devices

APPLICATION

- * Ultra high speed switching

FEATURE

- * Small surface mounting type. (SOT-23)
- * High speed. (T_{RR}=1.5nSec Typ.)
- * Suitable for high packing density.
- * Maximum total power dissipation is 300mW.
- * Peak forward current is 450mA.
- * Lead free devices

CONSTRUCTION

- * Silicon epitaxial planar

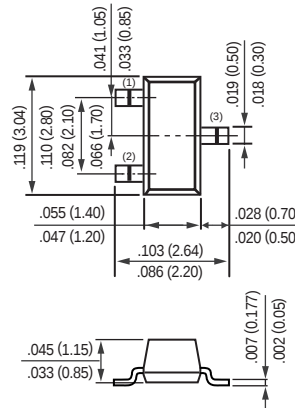
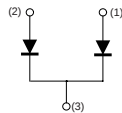
MARKING

- * A4



SOT-23

CIRCUIT



Dimensions in inches and (millimeters)

SOT-23

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

RATINGS	SYMBOL	BAV70PT	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	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

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

CHARACTERISTICS	SYMBOL	BAV70PT	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.

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RATING CHARACTERISTIC CURVES (BAV70PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

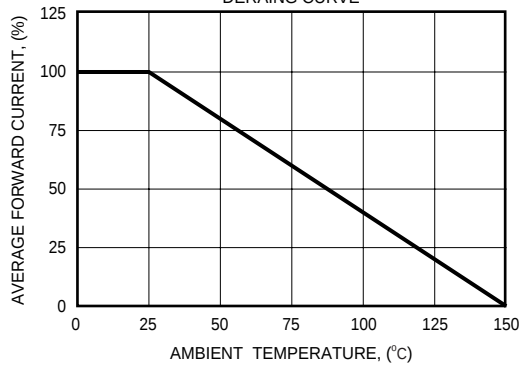


FIG. 2 - FORWARD CHARACTERISTICS

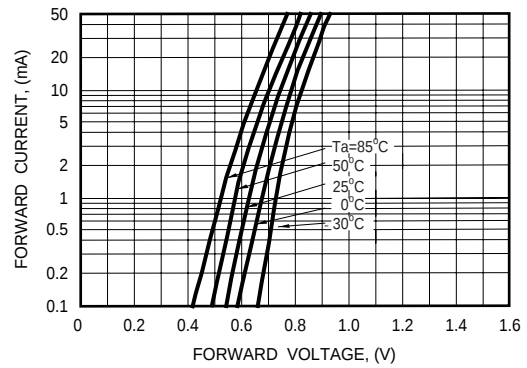


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

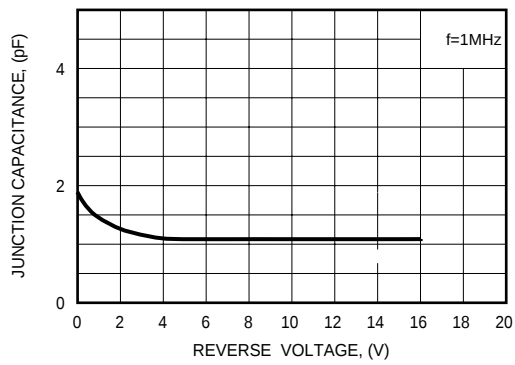


FIG. 4 - REVERSE CHARACTERISTICS

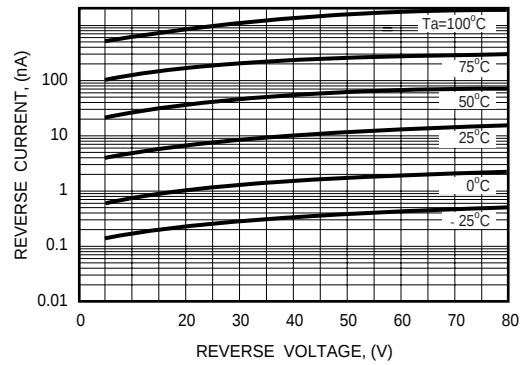


FIG. 5 - REVERSE RECOVERY TIME

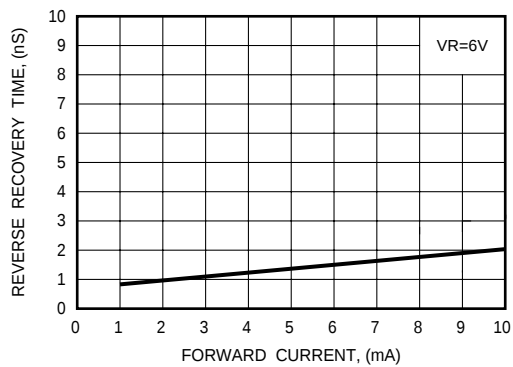


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

