



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SURFACE MOUNT SCHOTTKY DIODE

VOLTAGE 70 Volts CURRENT 70 mAmpers

BAS70CPT

APPLICATION

* Ultra high speed switching

FEATURE

- * Small surface mounting type. (SOT-23)
- * High speed. ($T_{RR}=2.5nSec$ Typ.)
- * Suitable for high packing density.
- * Maximum total power dissipation is 200mW.
- * Peak forward surge current is 100mA.

CONSTRUCTION

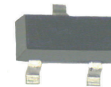
* PN junction guard ring protection

WEIGHT

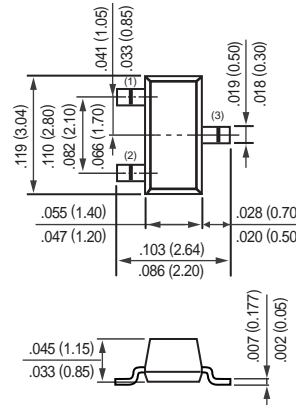
* 0.008 grams (Approx.)

MARKING

* B3



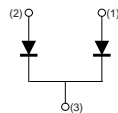
SOT-23



Dimensions in inches and (millimeters)

SOT-23

CIRCUIT



RATINGS	SYMBOL	BAS70CPT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	70	Volts
Maximum RMS Voltage	V_{RMS}	49	Volts
Maximum DC Blocking Voltage	V_{DC}	70	Volts
Maximum Average Forward Rectified Current	I_o	70	mAmps
Peak Forward Surge Current at 1Sec.	I_{FSM}	100	mAmps
Typical Junction Capacitance between Terminal (Note 1)	C_J	2.0	pF
Maximum Reverse Recovery Time (Note 2)	T_{RR}	5.0	nSec
Maximum Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

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

CHARACTERISTICS	SYMBOL	BAS70CPT	UNITS
Maximum Instantaneous Forward Voltage	@ $I_F = 1.0mA$	410	mVolts
	@ $I_F = 15mA$	1000	mVolts
Maximum Average Reverse Current at $V_R = 50V$	I_R	100	nAmps

- NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 0! volts.
 2. Measured at applied forward current of 10mA and reverse current of 10mA.
 3. ESD sensitive product handling required.

2002-10

RATING CHARACTERISTIC CURVES (BAS70CPT)

FIG. 1 - FORWARD CHARACTERISTICS

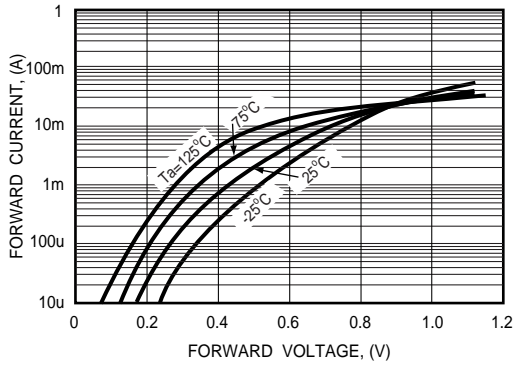


FIG. 2 - REVERSE CHARACTERISTICS

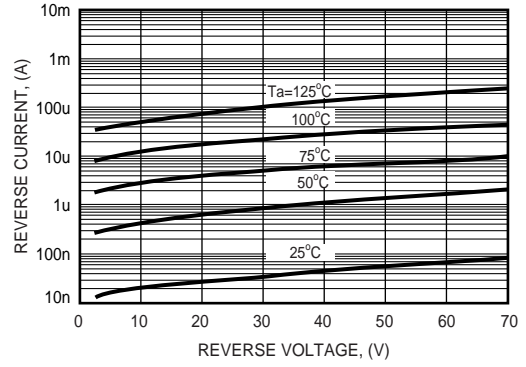


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

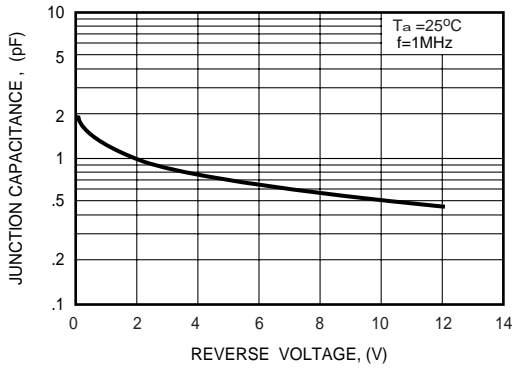


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

