



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SURFACE MOUNT SCHOTTKY DIODE

VOLTAGE 70 Volts CURRENT 70 mAmpes

BAS70PT

APPLICATION

* Ultra high speed switching

FEATURE

- * Small surface mounting type. (SOT-23)
- * High speed. ($T_{RR}=2.5\text{nSec}$ 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

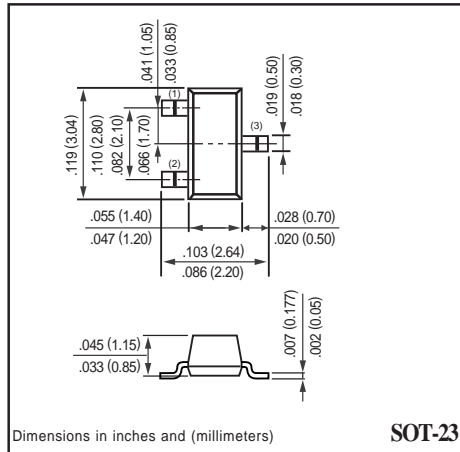
* 0.008 grams (Approx.)

MARKING

* B1

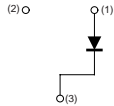


SOT-23



SOT-23

CIRCUIT



RATINGS	SYMBOL	BAS70PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	70	Volts
Maximum RMS Voltage	VRMS	49	Volts
Maximum DC Blocking Voltage	VDC	70	Volts
Maximum Average Forward Rectified Current	IO	70	mAmps
Peak Forward Surge Current at 1Sec.	IFSM	100	mAmps
Typical Junction Capacitance between Terminal (Note 1)	CJ	2.0	pF
Maximum Reverse Recovery Time (Note 2)	TRR	5.0	nSec
Maximum Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	TSTG	-65 to +150	°C

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

CHARACTERISTICS	SYMBOL	BAS70PT	UNITS
Maximum Instantaneous Forward Voltage	@If= 1.0mA	410	mVolts
	@If= 15mA	1000	
Maximum Average Reverse Current at VR= 50V	IR	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 (BAS70PT)

FIG. 1 - FORWARD CHARACTERISTICS

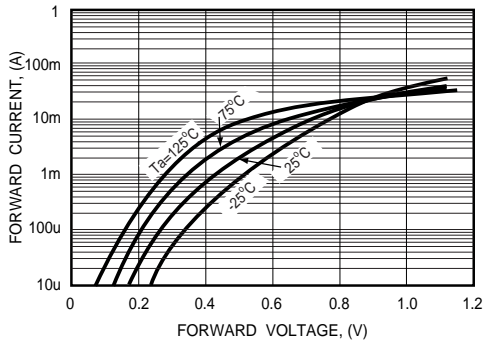


FIG. 2 - REVERSE CHARACTERISTICS

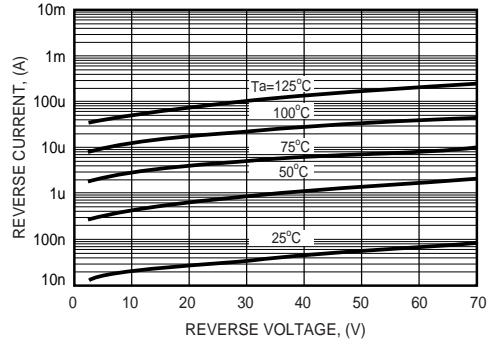


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

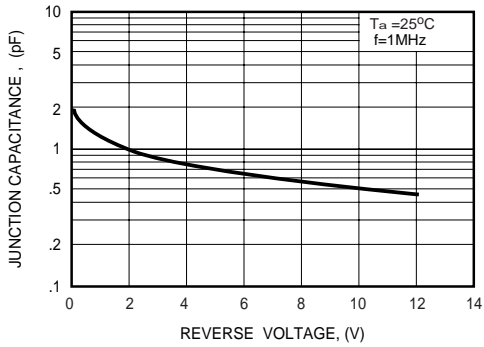


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

