



# CHENMKO ENTERPRISE CO.,LTD

Lead free devices

## SURFACE MOUNT SCHOTTKY DIODE

VOLTAGE 70 Volts CURRENT 70 mAmpers

**BAS70TPT**

### APPLICATION

\* Ultra high speed switching

### FEATURE

- \* Small surface mounting type. (SC-75/SOT-416)
- \* High speed. ( $T_{RR}=2.5nSec$  Typ.)
- \* Suitable for high packing density.
- \* Maximum total power dissipation is 150mW.
- \* Peak forward surge current is 100mA.

### CONSTRUCTION

\* PN junction guard ring protection

### WEIGHT

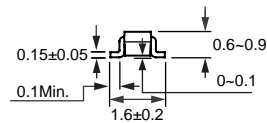
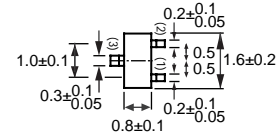
\* 0.002 grams ( Approx.)

### MARKING

\* TW



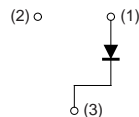
SC-75/SOT-416



Dimensions in millimeters

SC-75/SOT-416

### CIRCUIT



RATINGS	SYMBOL	BAS70TPT	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	BAS70TPT	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 0.0 volts.
  2. Measured at applied forward current of 10mA and reverse current of 10mA.
  3. ESD sensitive product handling required.

2003-09

## RATING CHARACTERISTIC CURVES ( BAS70TPT )

FIG. 1 - FORWARD CHARACTERISTICS

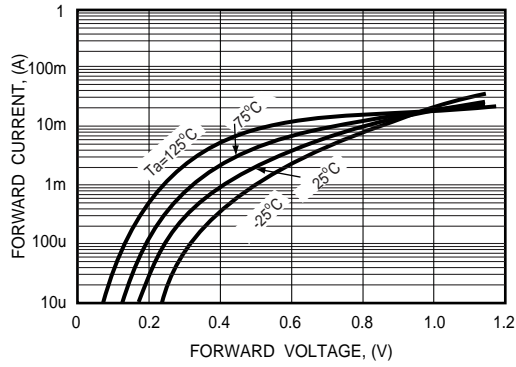


FIG. 2 - REVERSE CHARACTERISTICS

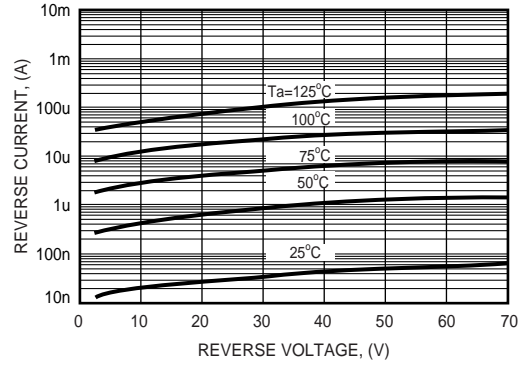


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

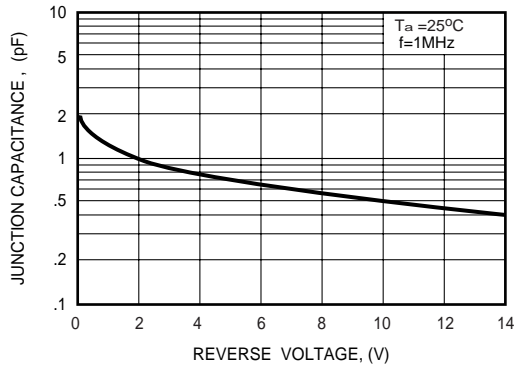


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

