



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

**SURFACE MOUNT
SCHOTTKY DIODE**

VOLTAGE 70 Volts CURRENT 70 mAmperes

BAS70TCPT

APPLICATION

* Ultra high speed switching

FEATURE

- * Small surface mounting type. (SC-75/SOT-416)
- * High speed. (TRR=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

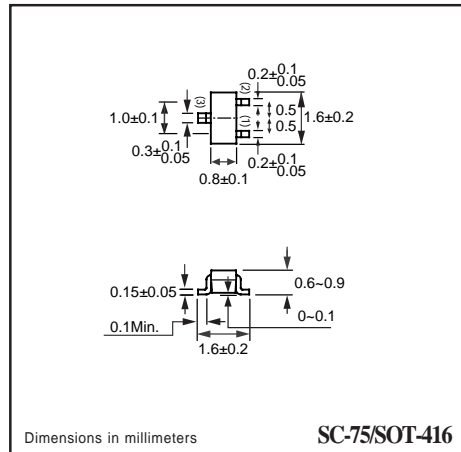
* 0.002 grams (Approx.)

MARKING

* TY



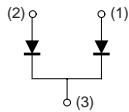
SC-75/SOT-416



Dimensions in millimeters

SC-75/SOT-416

CIRCUIT



| RATINGS | SYMBOL | BAS70TCPT | 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 | BAS70TCPT | 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 0.0 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 (BAS70TCPT)

FIG. 1 - FORWARD CHARACTERISTICS

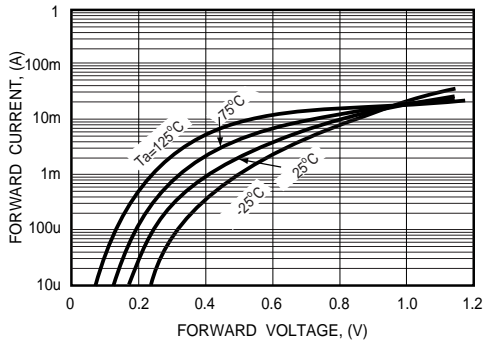


FIG. 2 - REVERSE CHARACTERISTICS

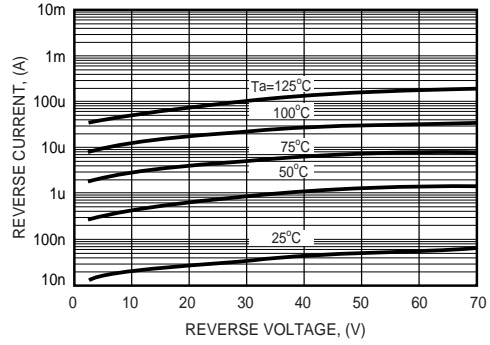


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

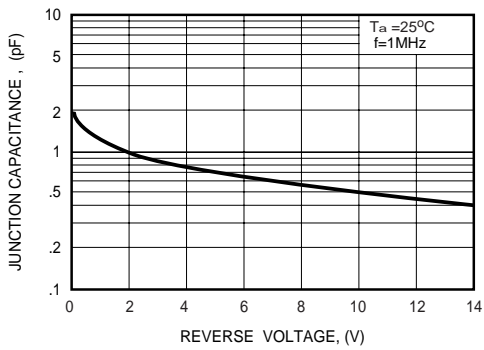


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

