



# CHENMKO ENTERPRISE CO.,LTD

Lead free devices

## SURFACE MOUNT SCHOTTKY DIODE

VOLTAGE 70 Volts CURRENT 70 mAmpers



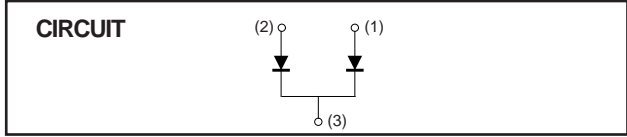
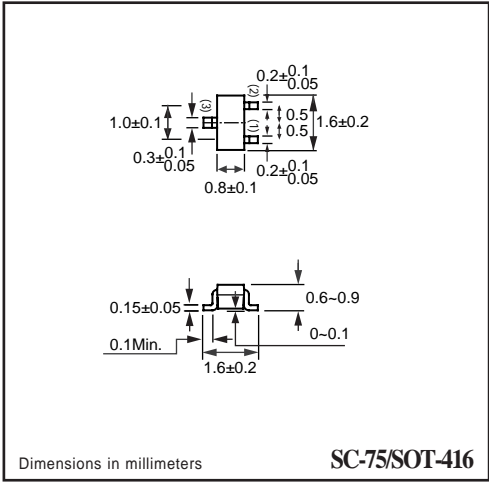
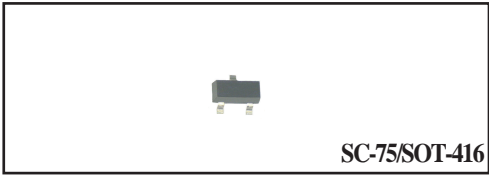
**APPLICATION**  
\* Ultra high speed switching

**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**  
\* TY



RATINGS	SYMBOL	BAS70TCPT	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	BAS70TCPT	UNITS
Maximum Instantaneous Forward Voltage	@ $I_F = 1.0mA$	410	mVolts
	@ $I_F = 15mA$	1000	
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.

## RATING CHARACTERISTIC CURVES ( BAS70TCPT )

FIG. 1 - FORWARD CHARACTERISTICS

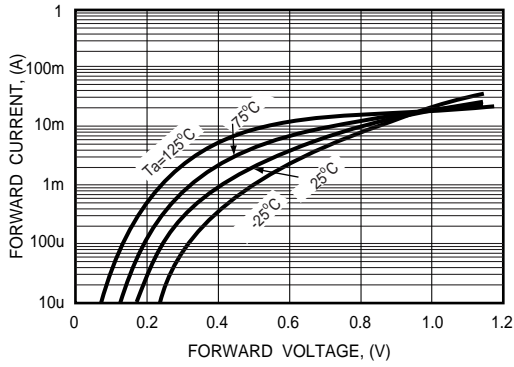


FIG. 2 - REVERSE CHARACTERISTICS

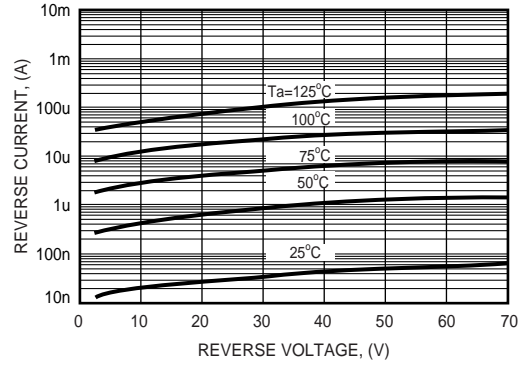


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

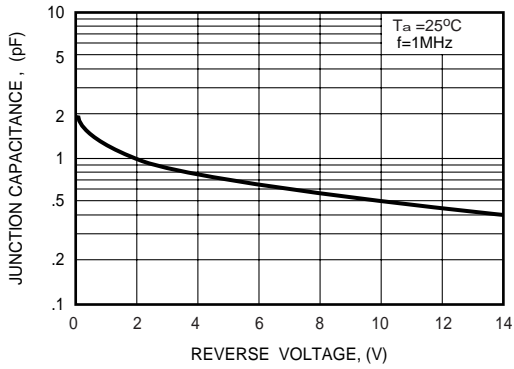


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

