CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT
SCHOTTKY DIODE
VOLTAGE 40 Volts CURRENT 0.2 Ampere

BAS40TCGP

Halogens free devices

APPLICATION
* Ultra high speed switching

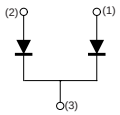
FEATURE
* Small surface mounting type. (SC-75/SOT-416)
* High speed. (T_{RR}=2.5nSec Typ.)
* Suitable for high packing density.
* Maximum total power disspation is 200mW.
* Peak forward current is 300mA.

CONSTRUCTION
* Silicon epitaxial planar

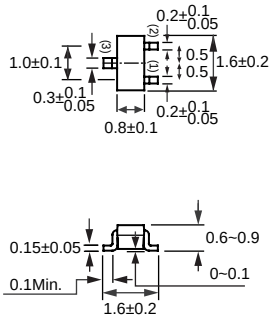
WEIGHT
* 0.006 grams (Approx.)

MARKING
* TQ

CIRCUIT



SC-75/SOT-416



Dimensions in millimeters

SC-75/SOT-416

RATINGS	SYMBOL	BAS40TCGP	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	Volts
Maximum RMS Voltage	V_{RMS}	28	Volts
Maximum DC Blocking Voltage	V_{DC}	40	Volts
Maximum Average Forward Rectified Current	I_O	0.2	Amps
Peak Forward Surge Current at 1Sec.	I_{FSM}	0.6	Amps
Typical Junction Capacitance between Terminal (Note 1)	C_J	5.0	pF
Maximum Reverse Recovery Time (Note 2)	T_{RR}	5.0	nSec
Maximum Operating Temperature Range	T_J	-55 to +125	^oC
Storage Temperature Range	T_{STG}	-65 to +150	^oC

ELECTRICAL CHARACTERISTICS (At T_A = 25^{o}C unless otherwise noted)

CHARACTERISTICS		SYMBOL	BAS40TCGP	UNITS
Maximum Instantaneous Forward Voltage	@I_F= 1.0mA	V_F	380	mVolts
	@I_F= 40mA		1000	
Maximum Average Reverse Current at V_R= 30V		I_R	200	nAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 0.0 volts.
2. Measured at applied froward current of 10mA and reverse current of 10mA.
3. ESD sensitive product handling required.

2004-06

RATING CHARACTERISTIC CURVES (BAS40TCGP)

FIG. 1 - FORWARD CHARACTERISTICS

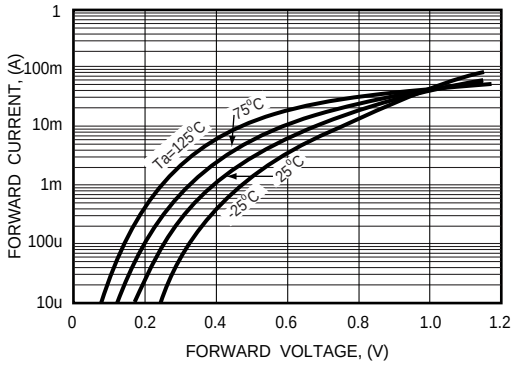


FIG. 2 - REVERSE CHARACTERISTICS

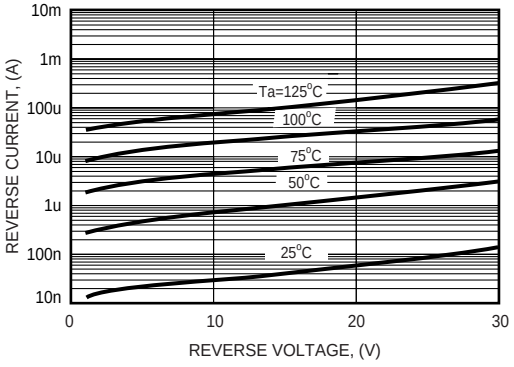


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

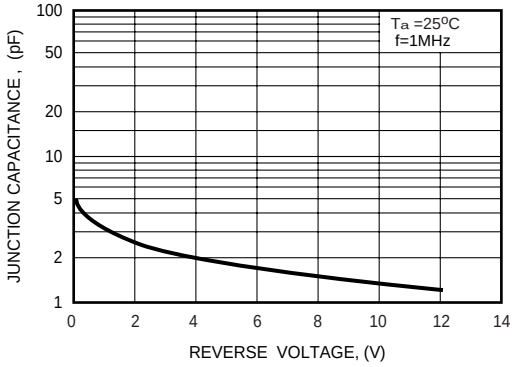


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE