



**CHENMKO ENTERPRISE CO.,LTD**

*Halogens free devices*

**SURFACE MOUNT**

**FAST SWITCHING DIODE**

**VOLTAGE RANGE 250 Volts CURRENT 200 mAmpere**

**BAS21TGP**

**FEATURES**

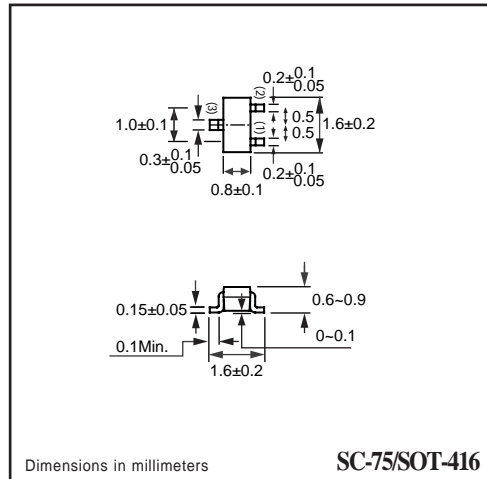
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* For surface mounted applications
- \* Low profile package
- \* Built-in strain relief
- \* Low power loss, high efficiency
- \* High current capability, low forward voltage drop
- \* Power dissipation: 150mW
- \* Repetitive peak forward surge current: 625mA
- \* High temperature soldering guaranteed : 260°C/10 seconds at terminals

**MECHANICAL DATA**

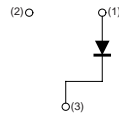
**Case:** JEDEC SC-75 molded plastic  
**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Weight:** 0.002 gram

**MARKING**

\* TE



**CIRCUIT**



**MAXIMUM RATINGS** ( At TA = 25°C unless otherwise noted )

RATINGS		SYMBOL	BAS21TGP	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	250	Volts
Maximum RMS Voltage		VRMS	141	Volts
Maximum DC Blocking Voltage		VDC	200	Volts
Maximum Average Forward Rectified Current at TL = 100°C		IO	200	mAmps
Non-Repetitive Peak Forward Surge Current	@ t=1.0uS	IFSM	2.5	Amps
	@ t=1.0S		0.5	
Typic Junction Capacitance (Note 2)		CJ	5.0	pF
Maximum Reverse Recovery Time (Note 3)		TRR	50	nS
Typical Thermal Resistance (Note 1)		R #JA	833	°C / W
Storage and Operating Temperature Range		TJ, TSTG	-65 to +150	°C

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

CHARACTERISTICS		SYMBOL	BAS21TGP	UNITS
Maximum Instantaneous Forward Voltage	@ IF = 100 mA	VF	1.00	Volts
	@ IF = 200 mA		1.25	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	IR	100	nAmps
	@ TJ = 100°C		15	uAmps
Breakdown Voltage(Minimun)		Bv	250	Volts

NOTES : 1. Thermal Resistance ( Junction to Lead ) : PC Board Mounted on 0.06 X 0.06" ( 0.15X 0.15mm ) copper pad area.  
 2. Measured at 1.0 MHz and applied reverse voltage of 0 volt.  
 3. IF=IR=30 mA, IRR=0.1XIR, RL=100 ohms

## RATING CHARACTERISTIC CURVES ( BAS21TGP )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

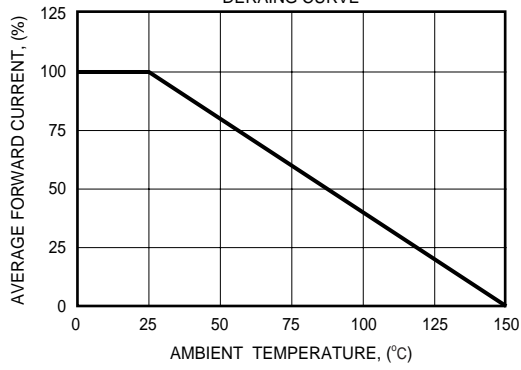


FIG. 2 - FORWARD CHARACTERISTICS

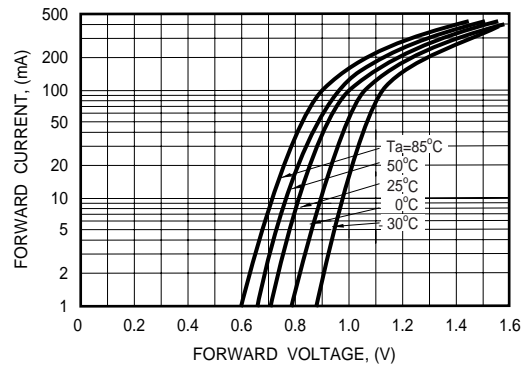


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

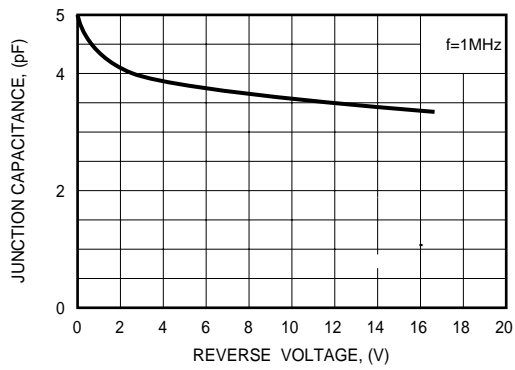


FIG. 4 - REVERSE CHARACTERISTICS

