



CHENMKO ENTERPRISE CO.,LTD

BAS21N1PT

SURFACE MOUNT

FAST SWITCHING DIODE

VOLTAGE RANGE 250 Volts CURRENT 200 mAmpere

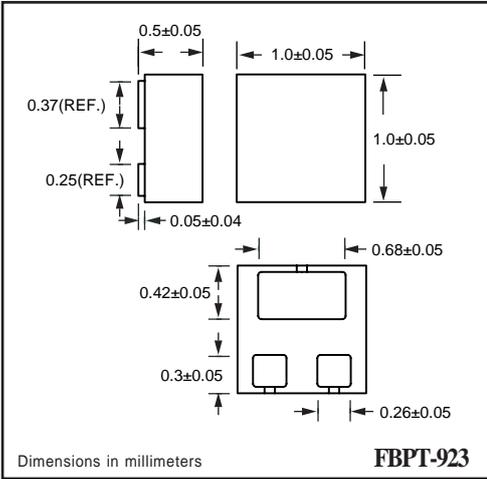
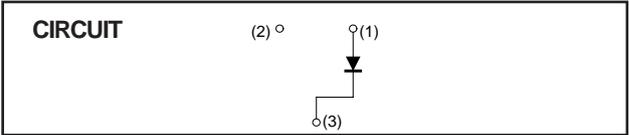
Lead free devices

APPLICATION
* Ultra high speed switching

FEATURE
* Small surface mounting type. (FBPT-923)
* High speed. ($T_{RR}=30nSec$ Typ.)
* Suitable for high packing density.

CONSTRUCTION
* Silicon epitaxial planar

FBPT-923



MAXIMUM RATINGS (At $T_A = 25^{\circ}C$ unless otherwise noted)

RATINGS	SYMBOL	BAS21N1PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	250	Volts
Maximum RMS Voltage	V_{RMS}	141	Volts
Maximum DC Blocking Voltage	V_{DC}	200	Volts
Maximum Average Forward Rectified Current at $T_L = 100^{\circ}C$	I_O	200	mAmps
Non-Repetitive Peak Forward Surge Current	@ $t=1.0\mu S$	2.5	Amps
	@ $t=1.0S$	0.5	
Typic Junction Capacitance (Note 2)	C_J	5.0	pF
Maximum Reverse Recovery Time (Note 3)	T_{RR}	50	nS
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	833	$^{\circ}C / W$
Storage and Operating Temperature Range	T_J, T_{STG}	-65 to +150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^{\circ}C$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	BAS21N1PT	UNITS
Maximum Instantaneous Forward Voltage	@ $I_F = 100 mA$	1.00	Volts
	@ $I_F = 200 mA$	1.25	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^{\circ}C$	100	nAmps
	@ $T_J = 100^{\circ}C$	15	uAmps
Breakdown Voltage(Minimun)	B_V	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. $I_F=I_R=30 mA, I_{RR}=0.1 \times I_R, R_L=100 ohms$

RATING CHARACTERISTIC CURVES (BAS21N1PT)

FIG. 1 - TYPICAL FORWARD CURRENT
DERATING CURVE

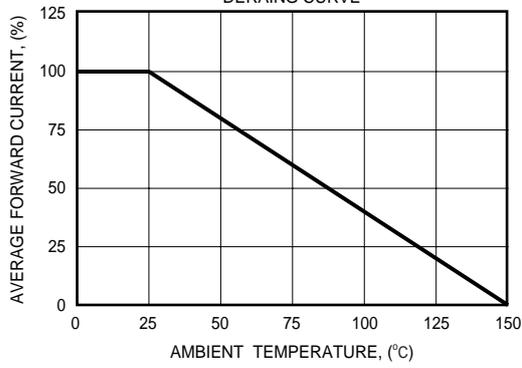


FIG. 2 - FORWARD CHARACTERISTICS

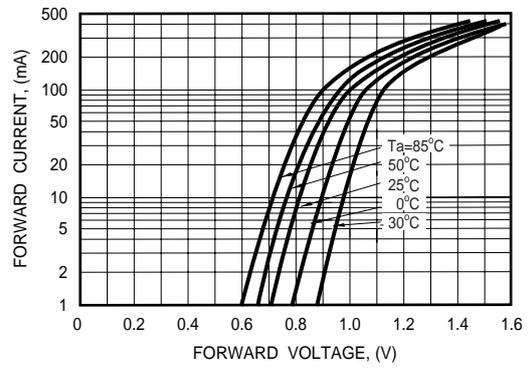


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

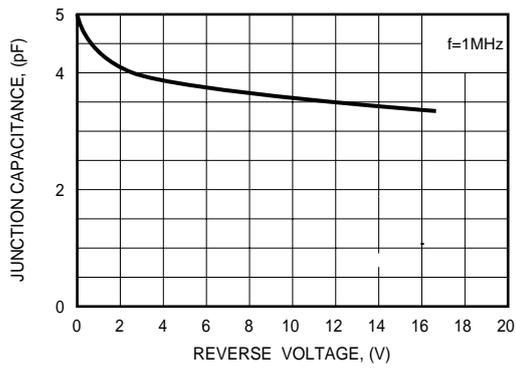


FIG. 4 - REVERSE CHARACTERISTICS

