

## Small Signal Switching Diodes

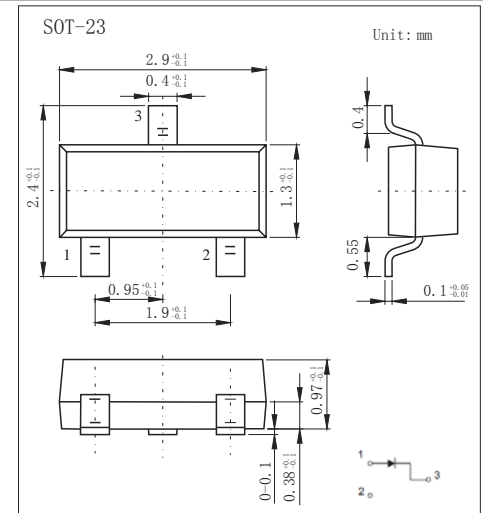
VOLTAGE RANGE: 120 /200V  
PEAK PULSE POWER:250mW

### FEATURE

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

### MECHANICAL DATA

- Case: SOT-23 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	BAS19	BAS20	Unit
$V_{RRM}$	Repetitive Peak Reverse Voltage	120	200	V
$V_{RWM}$	Working Peak Reverse Voltage	100	150	V
$I_O$	Average Rectified Output Current	200		mA
$I_{FSM}$	Non-Repetitive Peak Forward Surge Current @t=8.3ms	2.5		A
$P_d$	Power Dissipation	250		mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500		°C/W
$T_J$	Junction temperature	150		°C
$T_{stg}$	Storage Temperature	-55 ~ +150		°C

## Electrical Specification ( $T_A=25@25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	BAS19	120		V
			BAS20	200		V
Reverse current	$I_R$	$V_R=100\text{V}$ $V_R=150\text{V}$			0.1	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=100\text{mA}$ $I_F=200\text{mA}$			1	V
					1.25	V
Diodes capacitance	$C_D$	$V_R=0\text{V}, f=1\text{MHz}$			5	pF
Reveres recovery time	$t_{rr}$	$I_F=I_R=30\text{mA}, I_{rr}=0.1*I_R$			50	ns

MARKING: BAS19:JP BAS20:JR

# RATINGS AND CHARACTERISTIC CURVES

