

Small Signal Switching Diodes

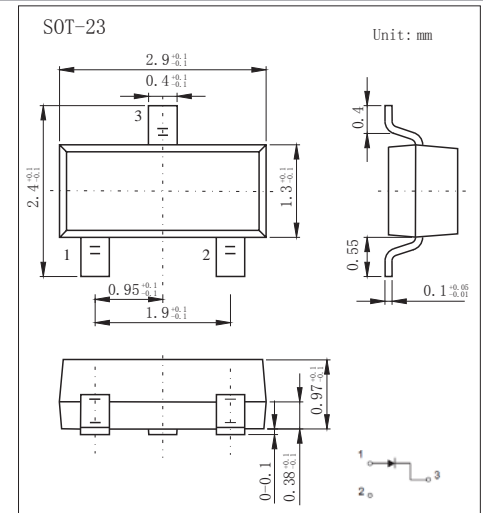
VOLTAGE RANGE: 120 /200V
PEAK PULSE POWER:250mW

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	$V_{(BR)}$	$I_R=100\mu\text{A}$	120			V
			200			
Reverse current	I_R	$V_R=100\text{V}$ $V_R=150\text{V}$			0.1	μA
Forward voltage	V_F	$I_F=100\text{mA}$ $I_F=200\text{mA}$			1	V
					1.25	
Diodes capacitance	C_D	$V_R=0\text{V}, f=1\text{MHz}$			5	pF
Reveres recovery time	t_{rr}	$I_F=I_R=30\text{mA}, I_{rr}=0.1 \cdot I_R$			50	ns

MARKING: BAS19:JP BAS20:JR



RATINGS AND CHARACTERISTIC CURVES

