

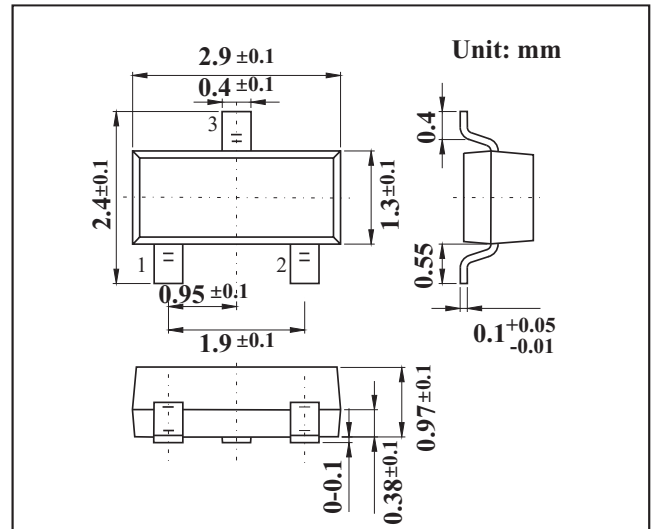
SOT23 Small Signal Switching Diodes

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)

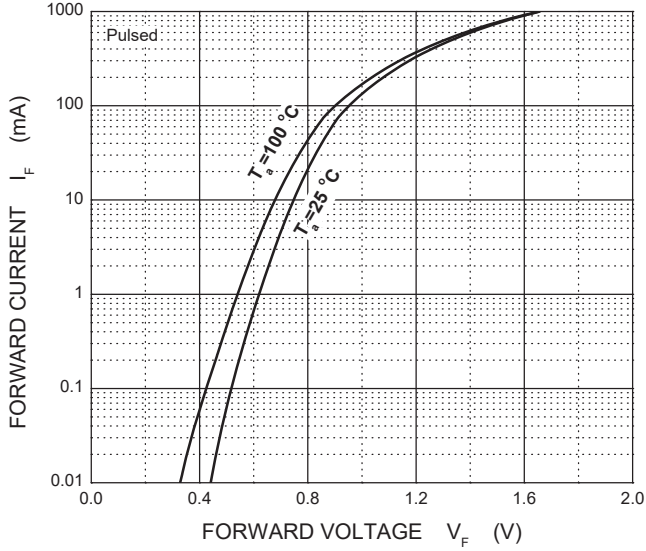
Symbol	Parameter	BAS19	BAS20	Un
V_{RRM}	Repetitive Peak Reverse Voltage	120	200	V
V_{RWM}	Working Peak Reverse Voltage	100	150	V
I_o	Average Rectified Output Current	200		mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @t=8.3ms	2.5		A
P_d	Power Dissipation	250		mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	5		°C/W
T_J	Junction temperature	0		°C
T_{stg}	Storage Temperature	-55 ~ +150		°C

Electrical Specification (T_A=25°C unless otherwise specified)

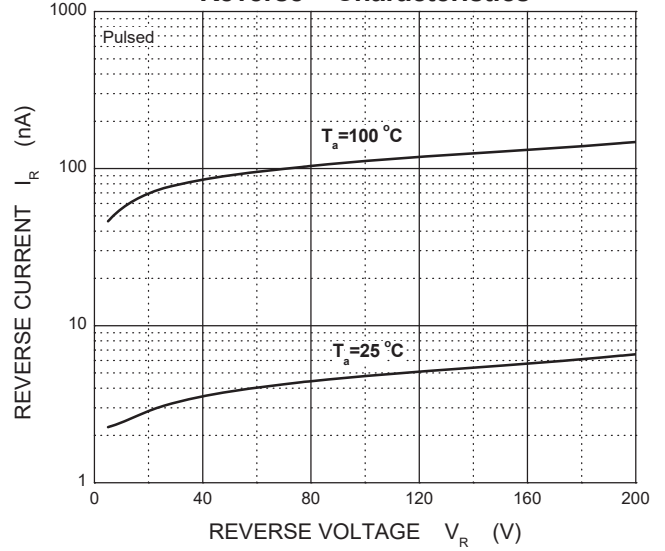
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse breakdown voltage	BAS19	$V_{(BR)}$ $I_R=100\mu A$	120			V
	BAS20		200			
Reverse current	BAS19	I_R $V_R=100V$ $V_R=150V$			0.1	μA
	BAS20					
Forward voltage	V_F	$I_F=100mA$ $I_F=200mA$			1	V
					1.25	V
Diodes capacitance	C_D	$V_R=0V, f=1MHz$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

RATINGS AND CHARACTERISTIC CURVES

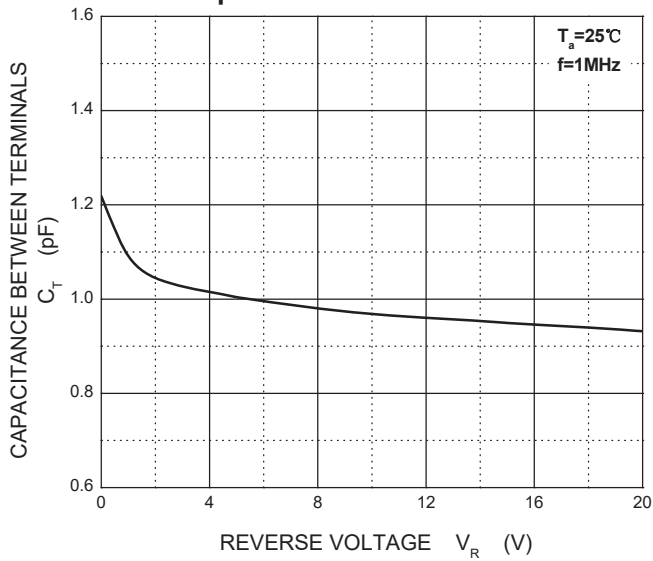
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

