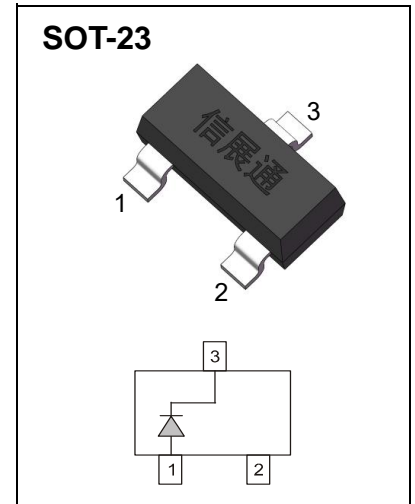


**FEATURES**

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

MARKING: A6

BAS19:JP	BAS20:JR

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

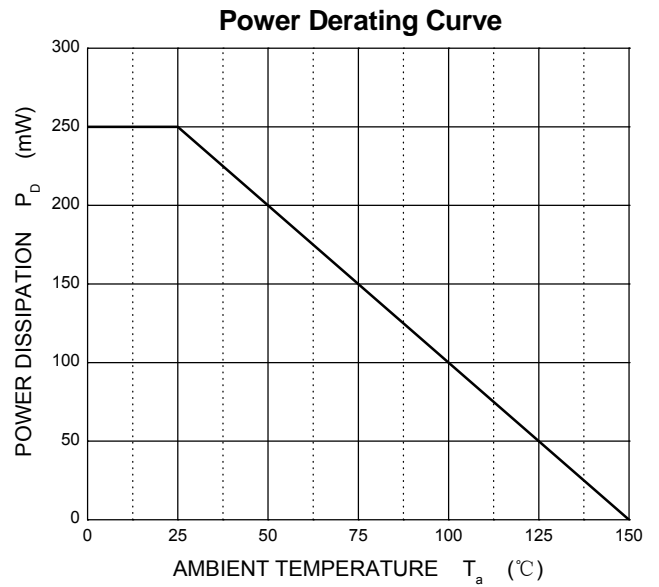
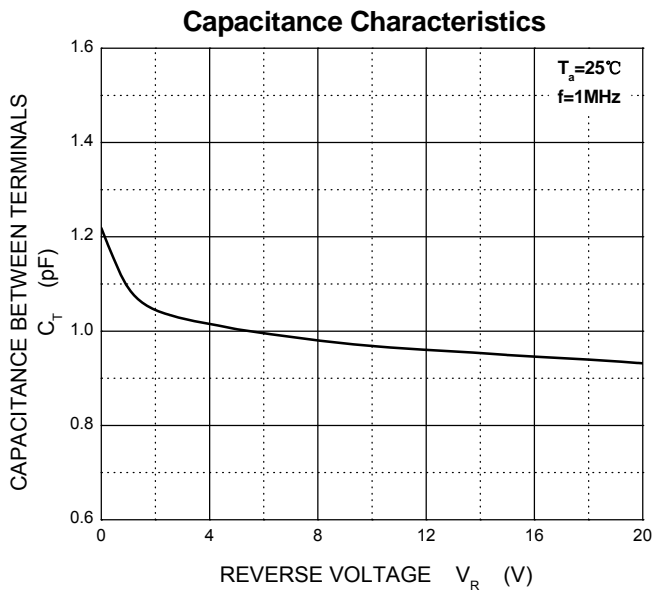
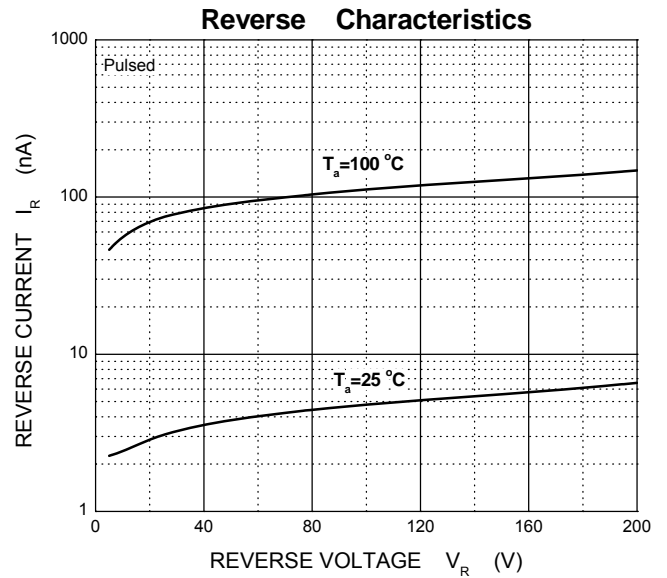
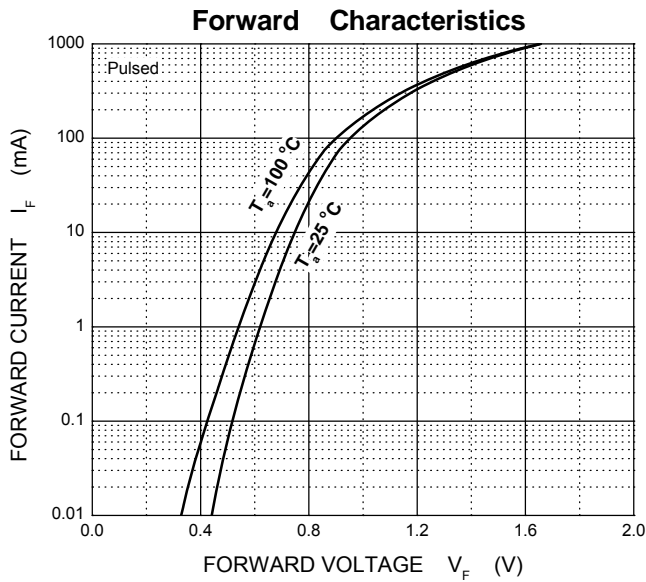
Symbol	Parameter	BAS19	BAS20	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	120	200	V
V_{RWM}	Working Peak Reverse Voltage	100	150	V
I_O	Average Rectified Output Current	200		mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2.5		A
P_d	Power Dissipation	250		mW
$R_{\theta JA}$	Thermal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

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

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

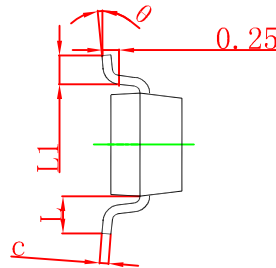


Typical Characteristics



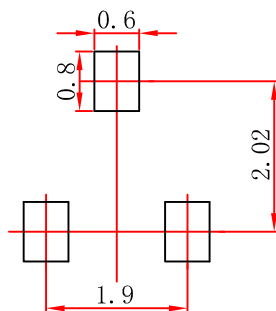


SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05mm.
3. The pad layout is for reference purposes only.