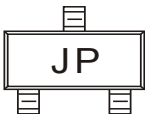
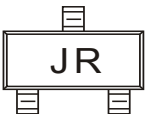
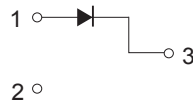
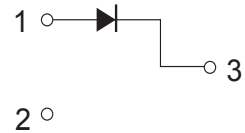
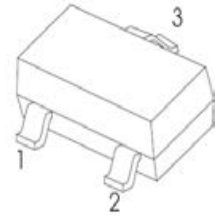


SOT-23 Plastic-Encapsulate Diodes**BAS19/BAS20****Switching Diodes****FEATURES**

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

MARKING

BAS19	BAS20
	

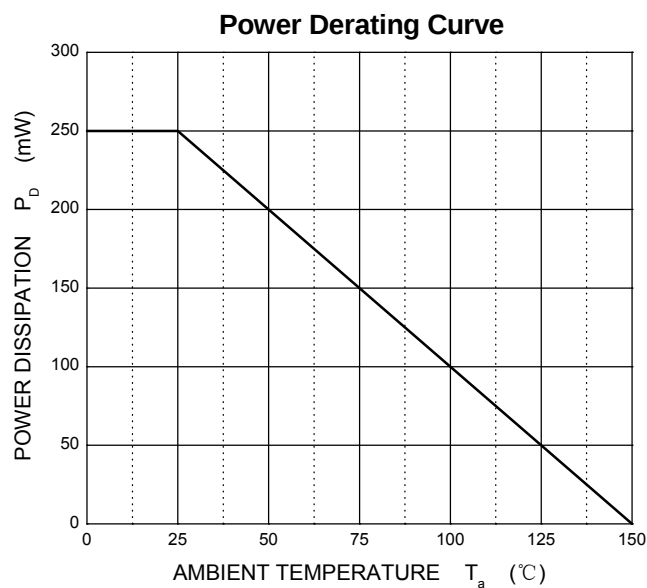
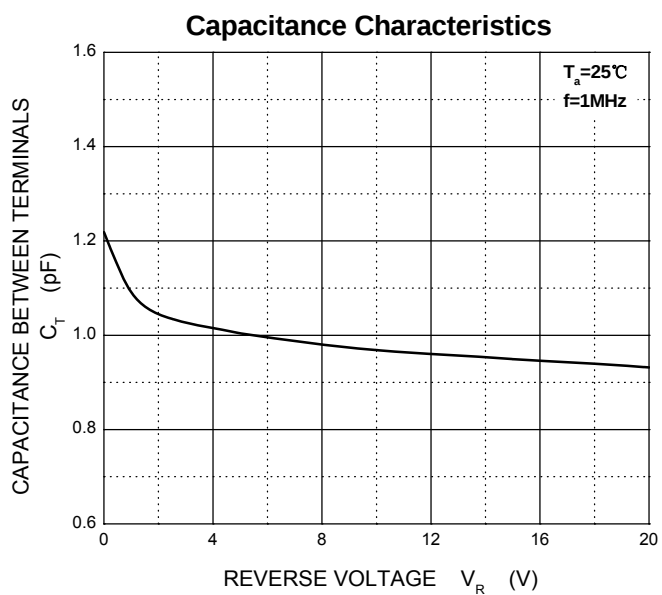
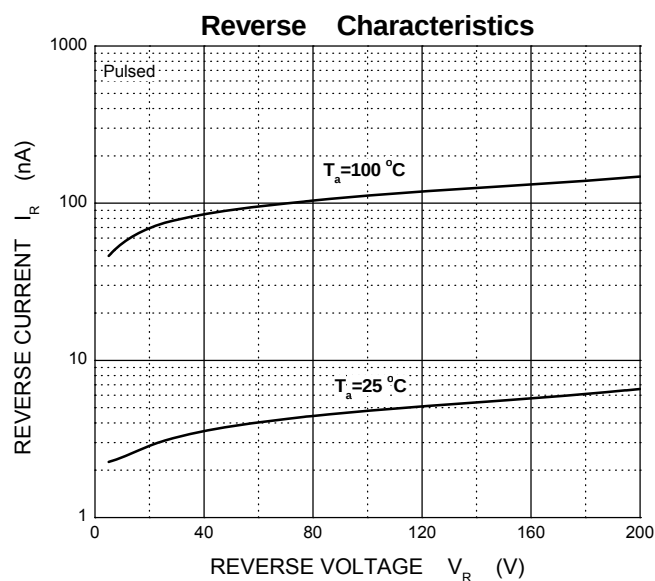
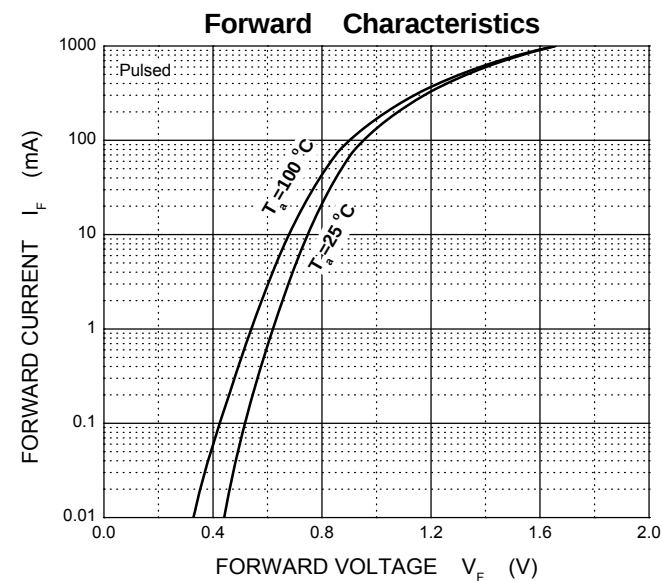
Equivalent Circuit**SOT-23****MAXIMUM RATINGS** ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

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	$-55 \sim +150$		$^{\circ}\text{C}$

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse breakdown voltage	BAS19 BAS20	$V_{(BR)}$ $I_R=100\mu\text{A}$	120 200			V
Reverse current	BAS19 BAS20	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



Package Outline Dimensions (SOT-23)



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°

Suggested Pad Layout (SOT-23)



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