

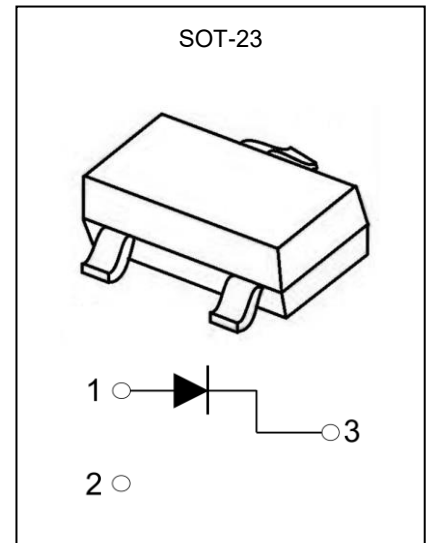


BAS19 Switching Diode

Feature

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

Marking: JP



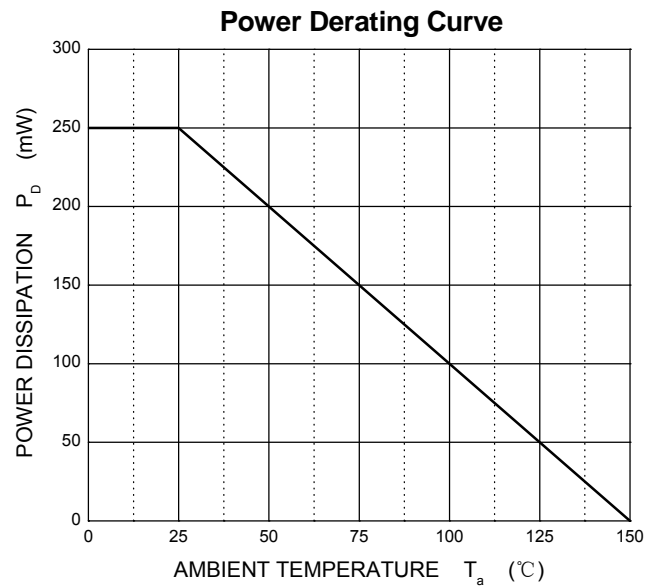
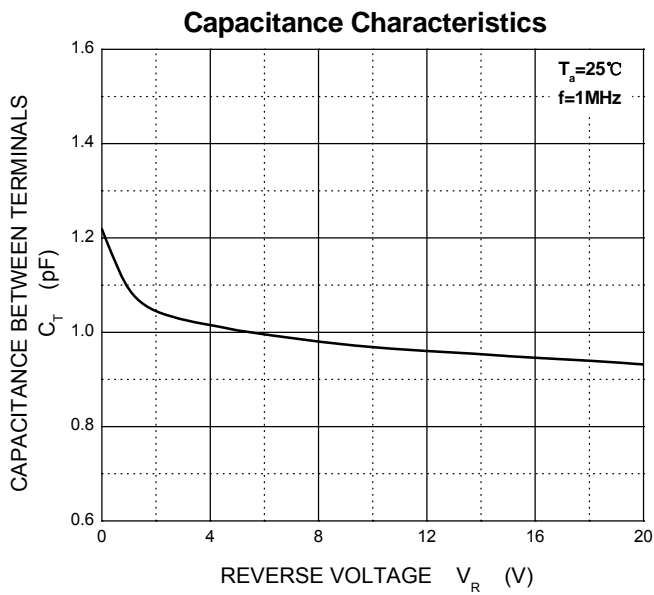
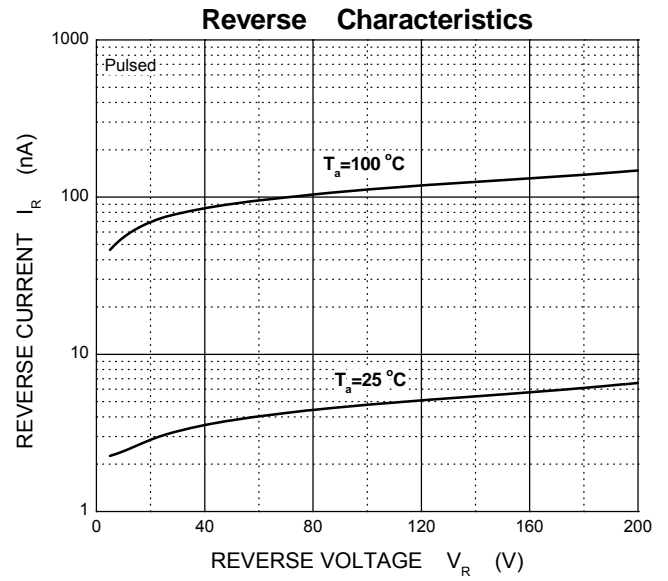
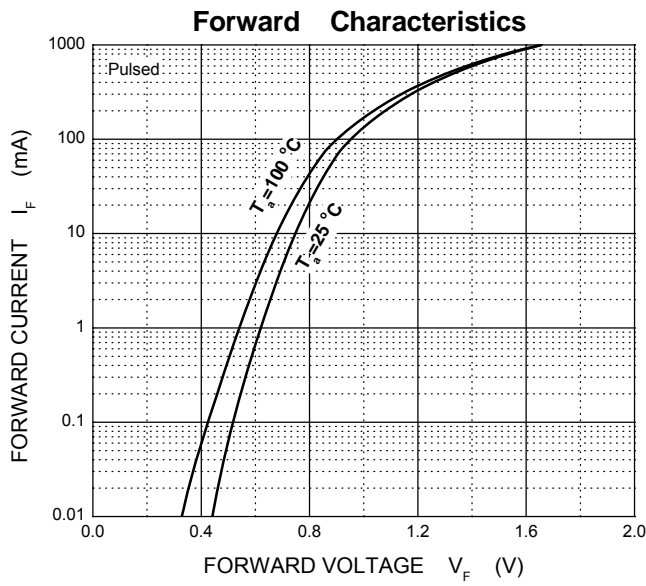
ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive peak reverse Voltage	V_{RRM}	120	V
Working peak reverse voltage	V_{RWM}	100	V
DC blocking voltage	V_R	120	V
Continuous Forward Current	I_O	0.2	A
Non-repetitive Peak Forward Current @ $t=8.3\text{ms}$	I_{FSM}	2.5	A
Power Dissipation	P_D	0.25	W
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$
Thermal Resistance	R_{JA}	500	$^{\circ}\text{C}/\text{W}$

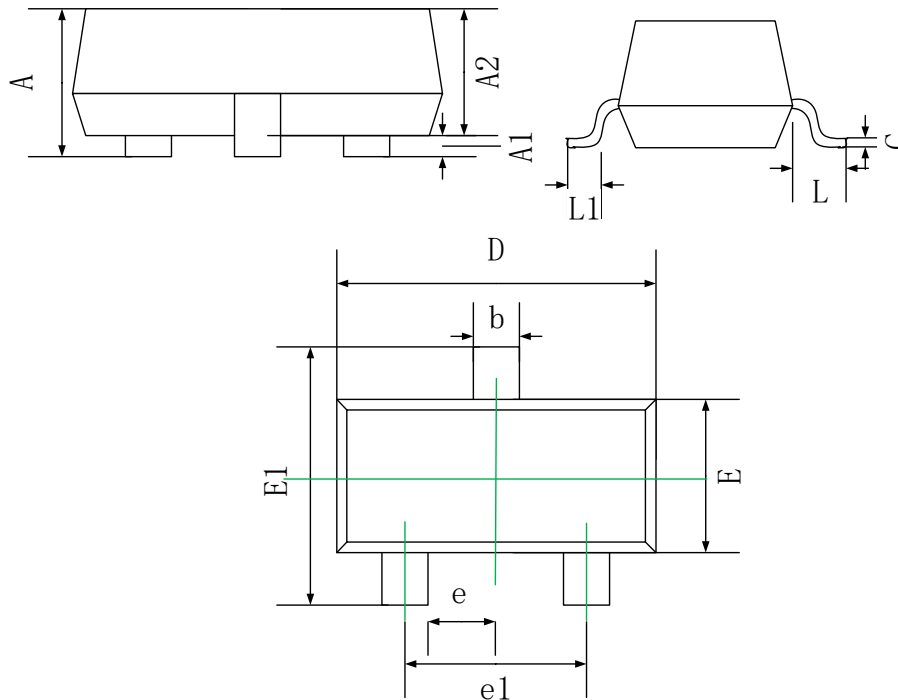
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	V_{BR}	$I_R = 100\mu\text{A}$	120			V
Forward voltage	V_F	$I_F = 100\text{mA}$			1	V
		$I_F = 200\text{mA}$			1.25	V
Reverse current	I_R	$V_R = 100\text{V}$			100	nA
Typical Junction Capacitance	C_J	$V_R=0\text{V}, f=1.0\text{MHz}$			5	pF
Reverse Recovery Time	T_{RR}	$I_F = I_R = 30\text{mA}, I_{RR}=3\text{mA}, R_L = 100\Omega$			50	ns

Typical Characteristics

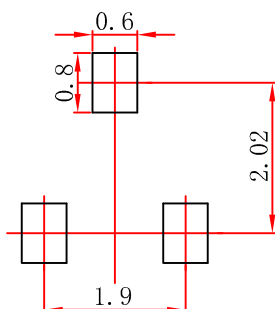


SOT-23 Package Information



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
A2	0.90	1.05
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
E1	2.25	2.55
e	0.95 REF.	
e1	1.80	2.00
L	0.55 REF.	
L1	0.30	0.50

SOT-23 Suggested Pad Layout



- Note:
1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.