

BAV19WS~BAV21WS Fast Switching Diodes

Feature

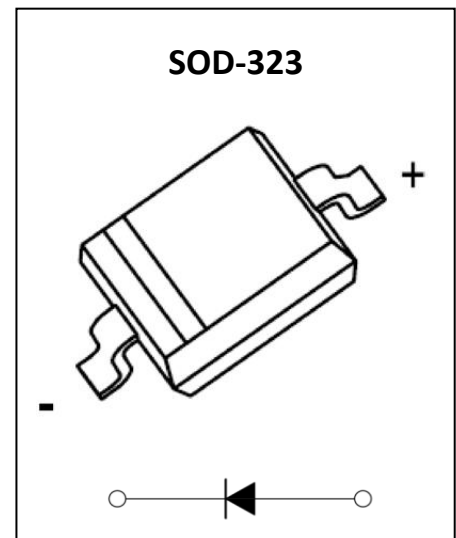
- Low Reverse Current
- Fast Switching Speed
- For General Purpose Switching Applications

Application

- Extreme fast switches

MARKING:

- BAV19WS: A8
- BAV20WS: T2
- BAV21WS: T3/JS



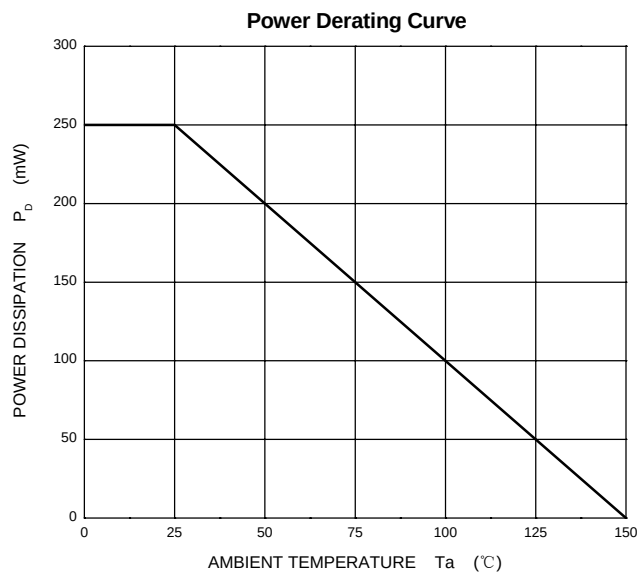
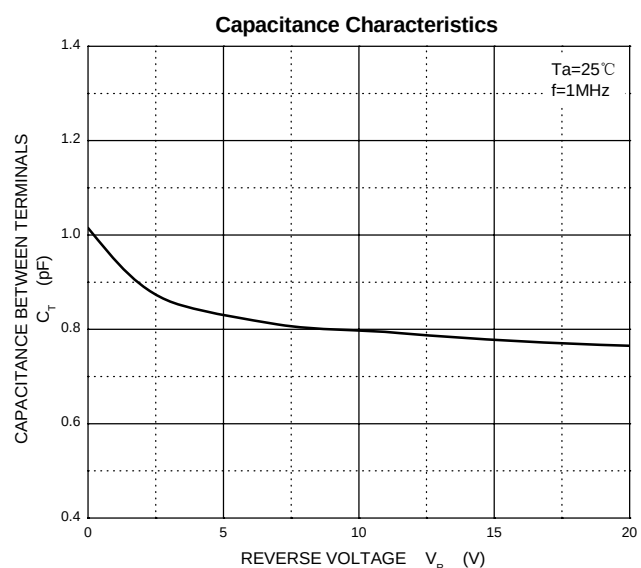
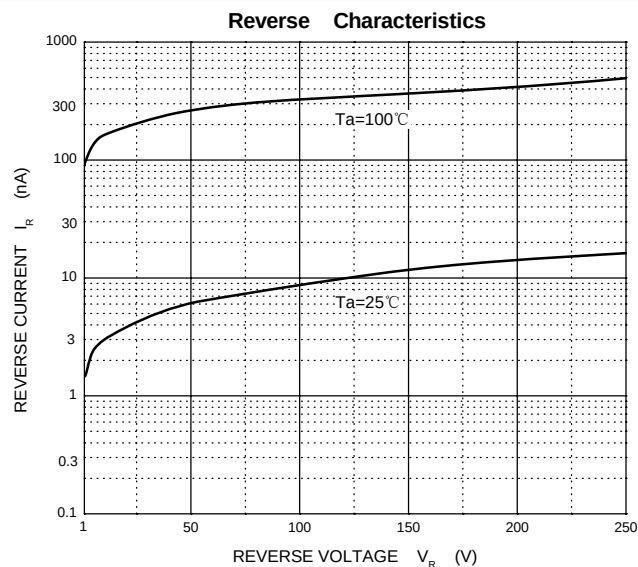
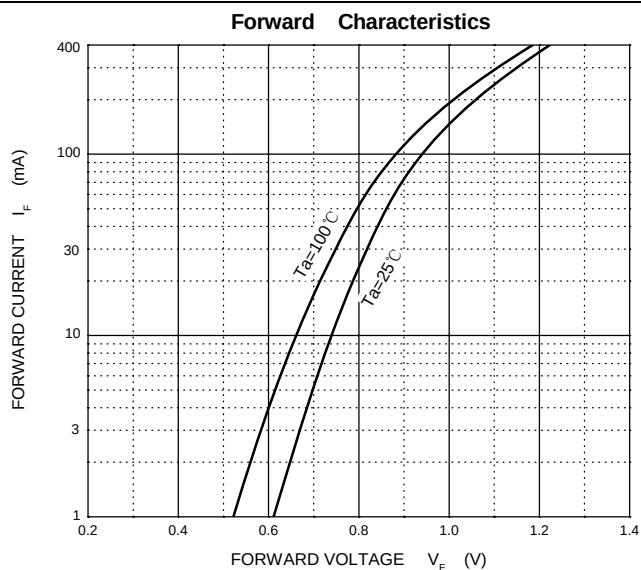
ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value		Unit
Non-Repetitive Peak Reverse Voltage	V_{RSM}	BAV19WS	100	V
		BAV20WS	150	V
		BAV21WS	200	V
Repetitive Peak Reverse Voltage	V_{RRM}	BAV19WS	120	V
		BAV20WS	200	
		BAV21WS	250	
Average rectified output current	I_o	0.20		A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ ms}$	I_{FSM}	4.0		A
Power Dissipation	P_D	0.25		W
Junction Temperature	T_J	150		$^{\circ}\text{C}$
Storage Temperature	T_{STG}	$-55 \sim +150$		$^{\circ}\text{C}$

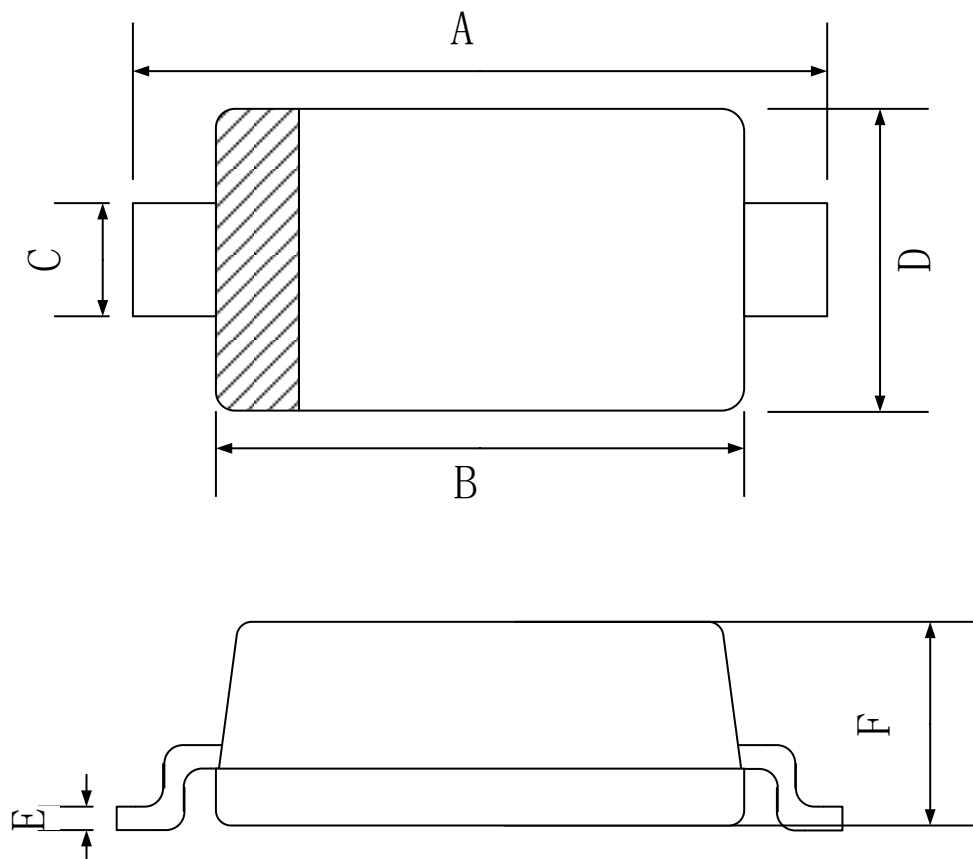
ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise noted)

Parameter	Symbol	Test Condition		Min	Max	Unit
Forward voltage	V _F	I _F =100mA			1	V
		I _F =200mA			1.25	V
Reverse Breakdown Voltage	V _{(BR)R}	I _R = 100μA	BAV19WS	120		V
			BAV20WS	200		
			BAV21WS	250		
Reverse current	I _R	V _R =100V	BAV19WS		100	nA
		V _R =150V	BAV20WS		100	
		V _R =200V	BAV21WS		100	
Diode capacitance	C _D	VR=0V, f=1MHz			5	pF
Reverse Recovery Time	trr	IF=IR=30mA, I _{rr} =0.1*IR, RL=100Ω			50	ns

BAV21WS Typical Electrical and Thermal Characteristics

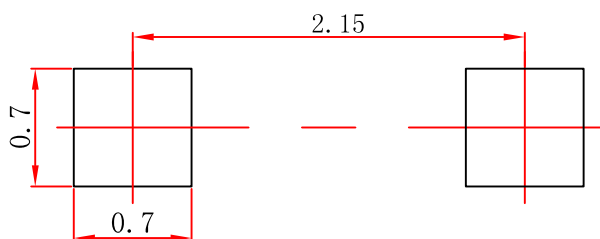


SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	2.50	2.60	2.70
B	1.60	1.70	1.80
C	0.25	0.30	0.35
D	1.20	1.30	1.40
E	0.08	0.12	0.15
F	0.80	0.90	1.00

SOD-323 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.