

BAV19WS THRU BAV21WS

Small-Signal Switching Diodes



Features

- V_R 100V/150V/200V
- I_{FAV} 200mA

Typical Applications

- Extreme fast switches

Mechanical Data

- **Package:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

	Marking
BAV19WS	A8
BAV20WS	T2
BAV21WS	T3

■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE	
Repetitive peak reverse voltage	V_{RRM}	V		BAV19WS	120
				BAV20WS	200
				BAV21WS	250
Non-Repetitive Peak Forward Surge Current	I_{FSM}	A	t=1s t=1us	0.5 2.5	
Average forward current	I_{FAV}	mA		200	
Power dissipation	P_{tot}	mW		250	
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	°C/W		500	
Maximum junction temperature	T_j	°C		-65 to +150	
Storage temperature range	T_{stg}	°C		-65 to +150	

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE	
Maximum Forward voltage	V_F	V	$I_F=100mA$	1.0	
			$I_F=200mA$	1.25	
Maximum Reverse current	I_R	nA	BAV19WS	$V_R=100V$	
			BAV20WS	$V_R=150V$	
			BAV21WS	$V_R=200V$	
Minimum Breakdown voltage	$V_{(BR)}$	V	BAV19WS	$I_R=10uA$	100
			BAV20WS	$I_R=10uA$	150
			BAV21WS	$I_R=10uA$	200
Maximum Diode capacitance	C_D	pF	$V_R=0V, f=1MHz$	5	
Maximum Reverse recovery time	t_{rr}	ns	$I_F=I_R=30mA, R_L=100\Omega, I_{RR}=3mA$	50	



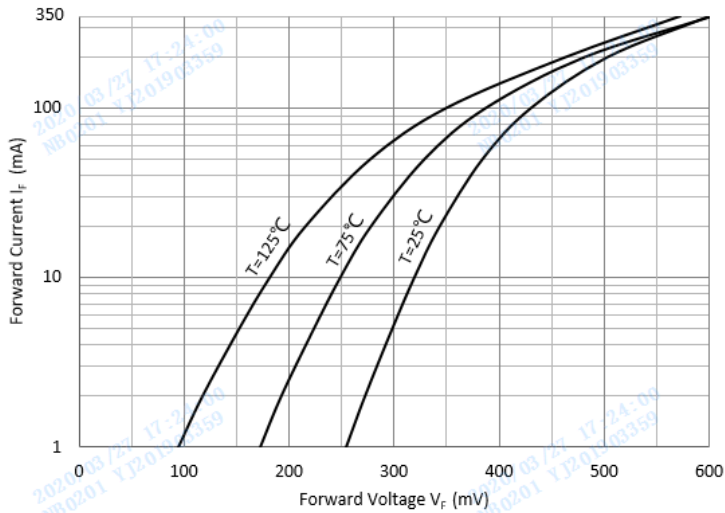
BAV19WS THRU BAV21WS

Ordering Information (Example)

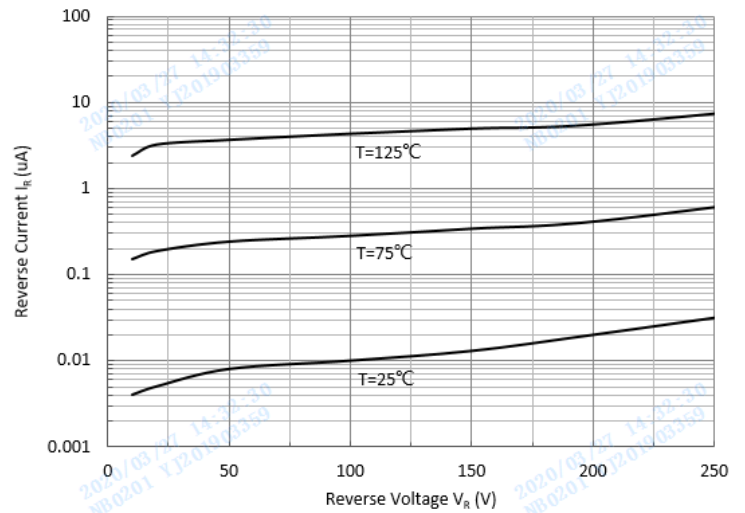
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAV19WS THRU BAV21WS	F2	Approximate 0.004	3000	30000	120000	7" reel

Characteristics(Typical)

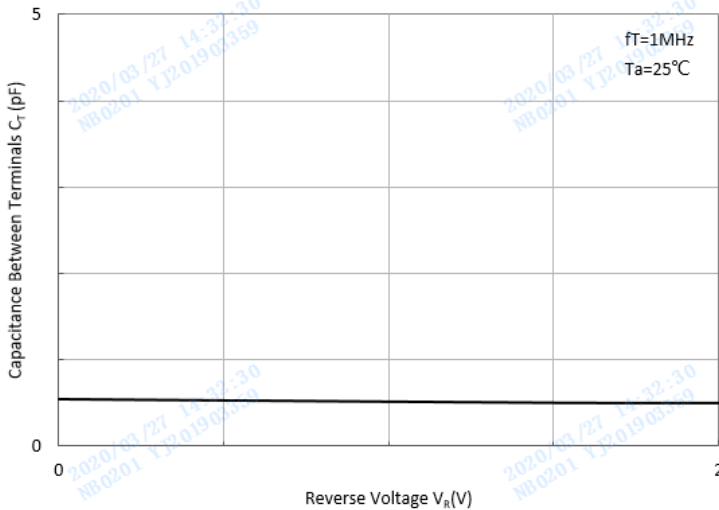
Forward Characteristics



Reverse Characteristics



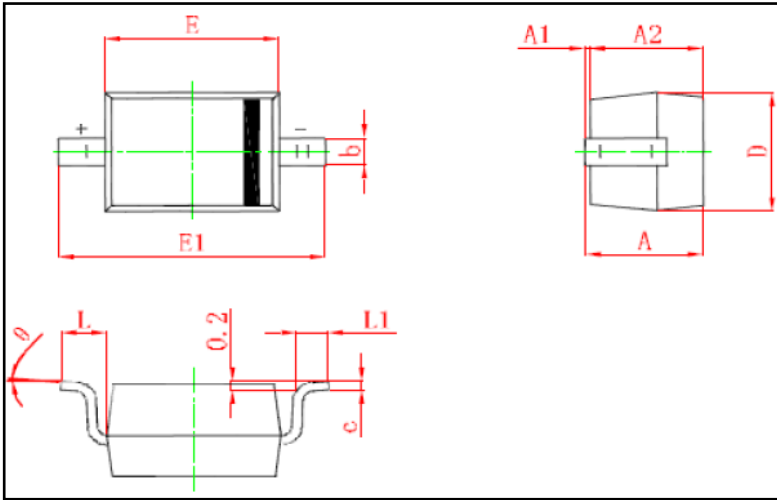
Capacitance Characteristics





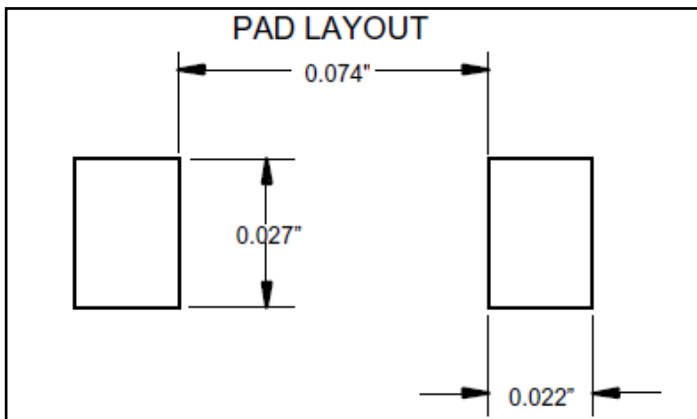
BAV19WS THRU BAV21WS

■ SOD-323 Package Outline Dimensions



Symbol	Min. (mm)	Max. (mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.400
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

■ SOD-323 Soldering Footprint



Unit: inches



BAV19WS THRU BAV21WS

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.