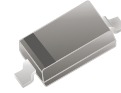


ABAV19WS-HF Thru. ABAV21WS-HF

RoHS Device
Halogen Free

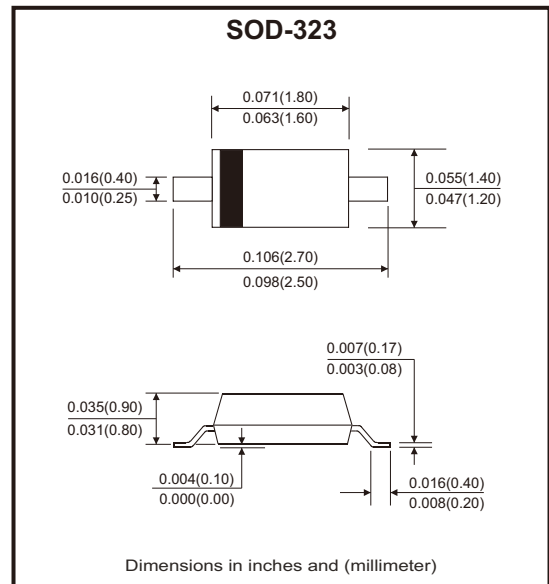


Features

- Epoxy meets UL-94 V-0 flammability rating.
- Moisture sensitivity Level 1.
- VRRM 120V to 250V.
- IFAV 200mA.
- AEC-Q101 Qualified.

Mechanical data

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



Circuit Diagram



Maximum Rating (at Ta=25°C unless otherwise noted)

Parameter	Symbol	ABAV19WS-HF	ABAV20WS-HF	ABAV21WS-HF	Unit
Reverse voltage	V _R	100	150	200	V
Repetitive peak reverse voltage	V _{RRM}	120	200	250	V
Average forward current	I _{FAV}	200			mA
Non-repetitive peak forward surge current tp < 10ms	I _{FSM}	1.7			A
Power dissipation	P _{tot}	250			mW
Thermal resistance junction to ambient	R _{θJA}	500			K/W
Maximum junction temperature	T _J	150			°C
Storage temperature range	T _{STG}	-55 to +150			°C

Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse voltage	V_R	$I_R = 100\mu A$	100		V
			150		
			200		
Forward voltage	V_F	$I_F = 100mA$ $I_F = 200mA$		1.0 1.25	V
Reverse current	I_R	$V_R = 100V$ $V_R = 150V$ $V_R = 200V$		0.1	μA
Diode capacitance	C_D	$V_R = V_F = 0V, f = 1MHz$		5	pF
Reverse recovery time	t_{rr}	$I_F = 30mA, I_{rr} = 0.1I_R, R_L = 100\Omega$		50	nS

Rating and Characteristic Curves (ABAV19WS-HF Thru. ABAV21WS-HF)

Fig.1 - Power Dissipation Characteristics

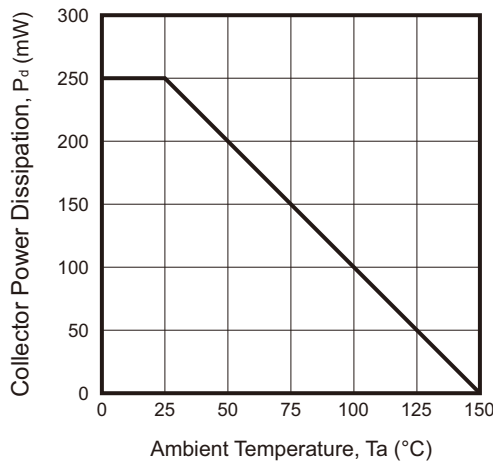


Fig.2 - Capacitance Characteristics

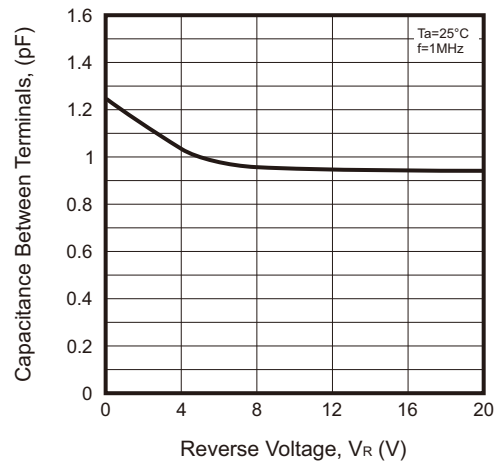


Fig.3 - Forward Characteristics

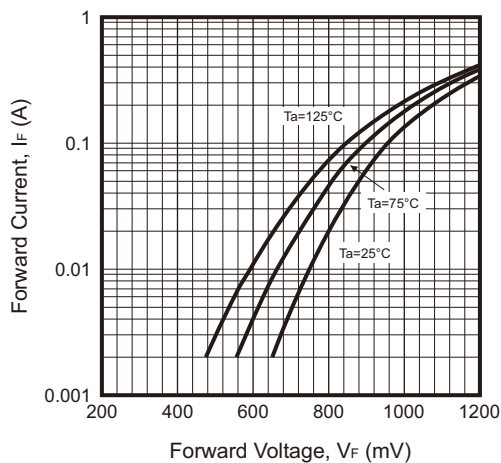
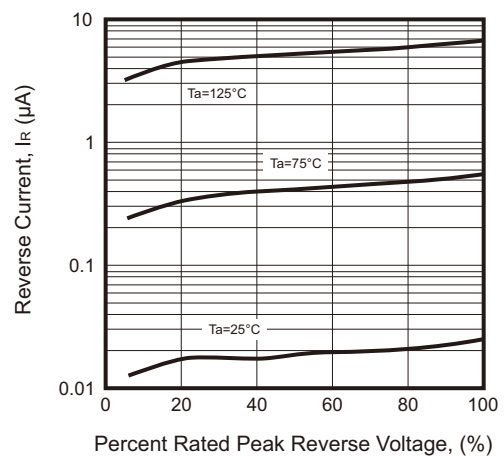
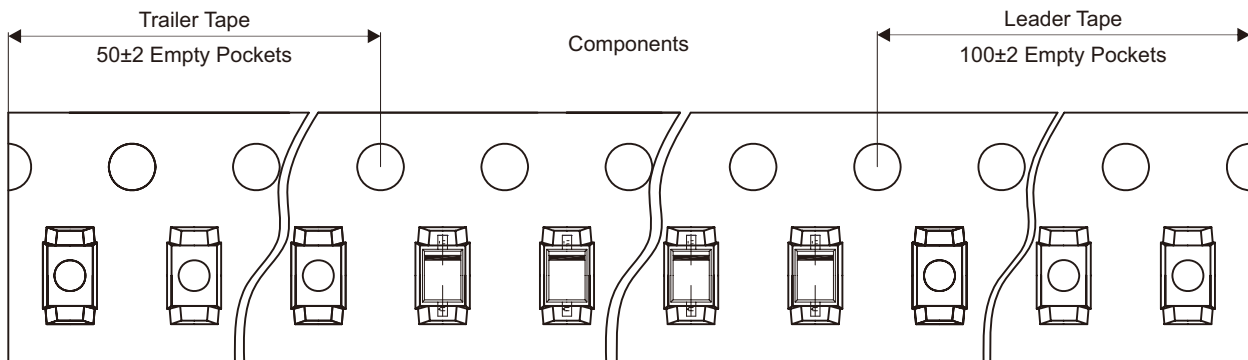
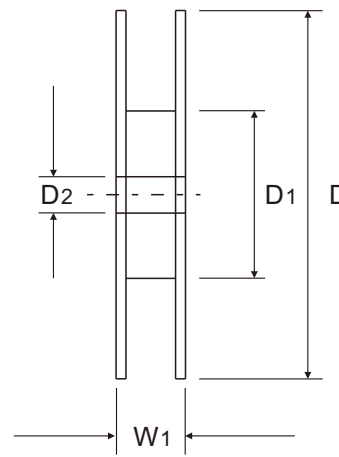
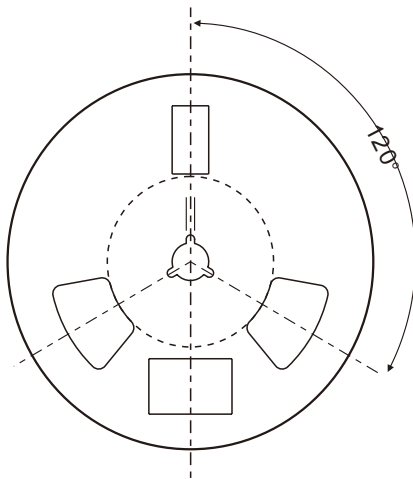
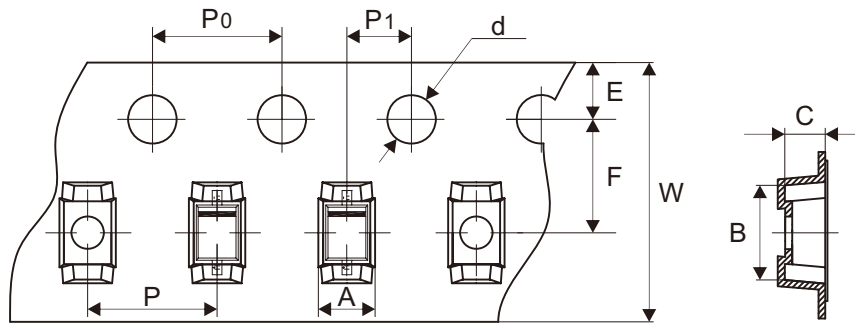


Fig.4 - Reverse Characteristics



Company reserves the right to improve product design, functions and reliability without notice.

Reel Taping Specification



SOD-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.46 ± 0.10	2.90 ± 0.10	1.25 ± 0.10	$1.50 + 0.10 - 0.00$	178.00 ± 1.00	54.60 ± 0.20	13.30 ± 0.20
	(inch)	0.057 ± 0.004	0.114 ± 0.004	0.049 ± 0.004	$0.059 + 0.004 - 0.000$	7.008 ± 0.039	2.150 ± 0.008	0.524 ± 0.008

SOD-323	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	$8.00 + 0.30 - 0.10$	9.60 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	$0.315 + 0.012 - 0.004$	0.378 ± 0.008

Company reserves the right to improve product design, functions and reliability without notice.

REV:A

Marking Code

Part Number	Marking Code
ABAV19WS-HF	A8.
ABAV20WS-HF	T2.
ABAV21WS-HF	T3.

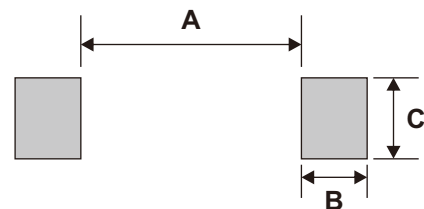


XX = Product type marking code

█ = Cathode band

Suggested PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	1.88	0.074
B	0.56	0.022
C	0.69	0.027



Note: 1. The pad layout is for reference purposes only.

Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-323	3,000	7