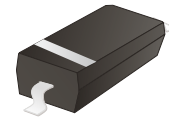


ABAV19W-HF Thru. ABAV21W-HF

RoHS Device
Halogen Free

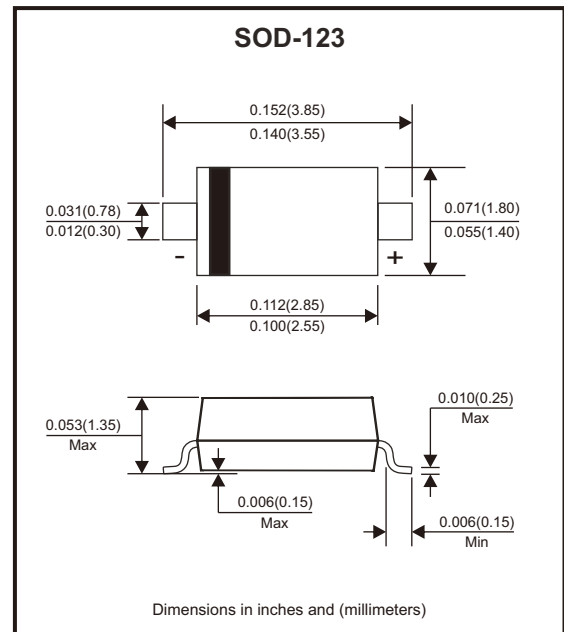


Features

- 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-123, 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	ABAV19W-HF	ABAV20W-HF	ABAV21W-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}	410			mW
Thermal resistance junction to ambient	R _{θJA}	305			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 (ABAV19W-HF Thru. ABAV21W-HF)

Fig.1 - Power Dissipation Characteristics

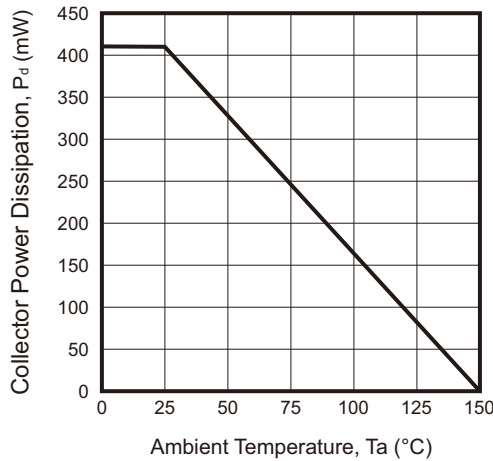


Fig.2 - Capacitance Characteristics

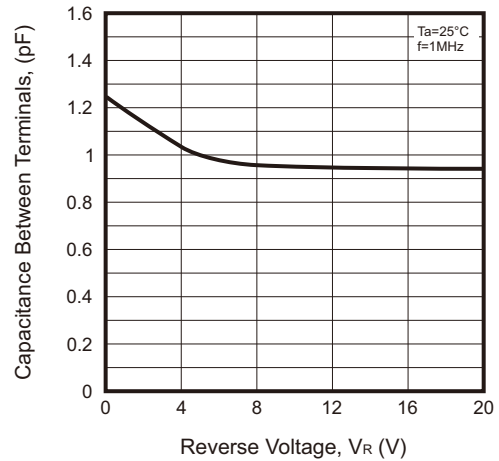


Fig.3 - Forward Characteristics

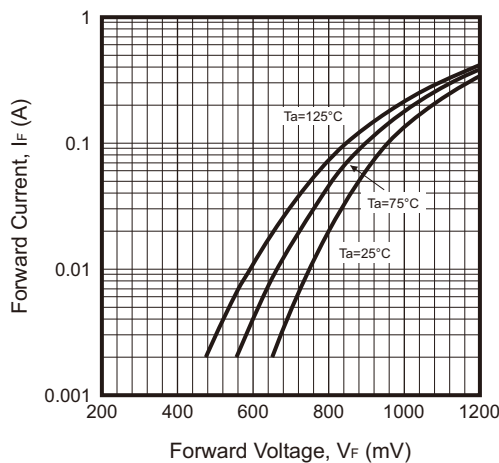
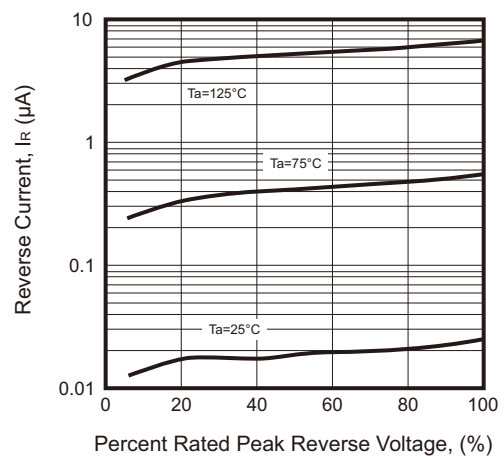
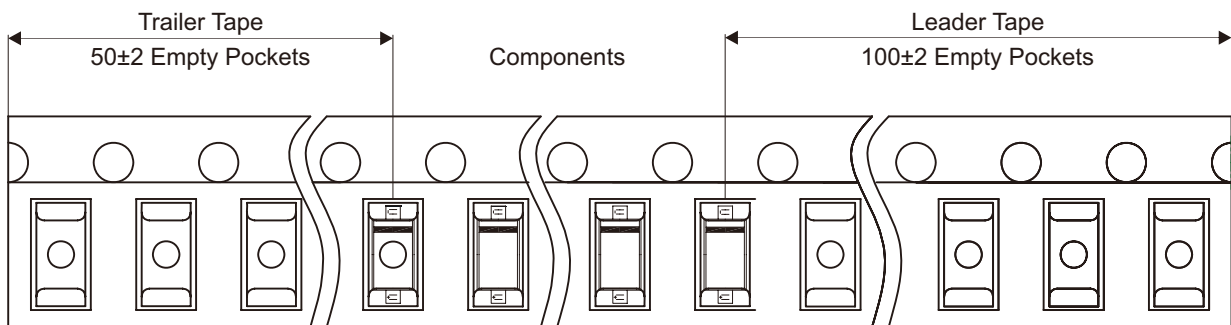
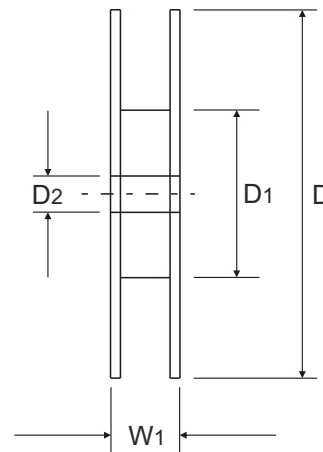
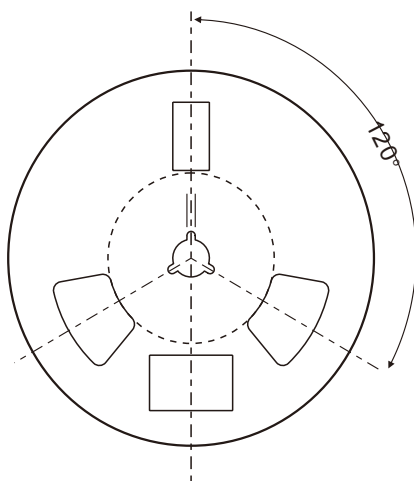
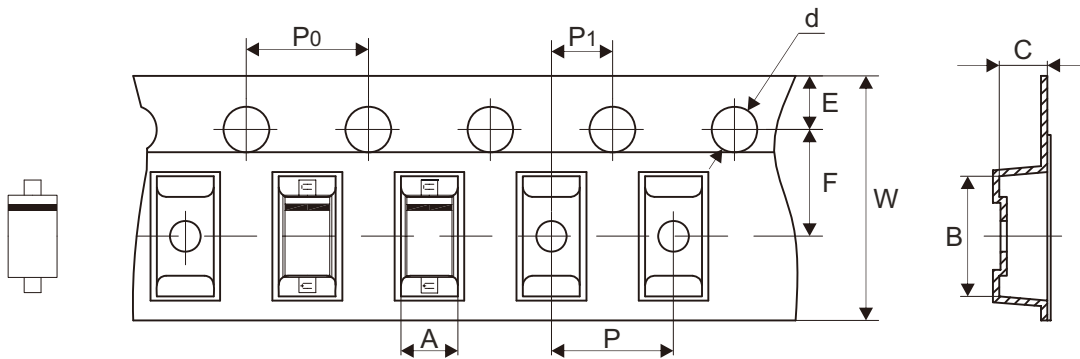


Fig.4 - Reverse Characteristics



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

Reel Taping Specification



SOD-123	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.75 ± 0.10	3.94 ± 0.10	1.52 ± 0.10	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.069 ± 0.004	0.155 ± 0.004	0.060 ± 0.004	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-123	SYMBOL	E	F	P	P1	P0	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	8.00 + 0.20 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.157 ± 0.004	0.315 + 0.008 - 0.004	0.484 ± 0.039

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

REV:A