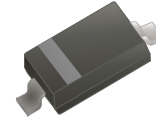


ABAV3004WS-HF

RoHS Device
Halogen Free

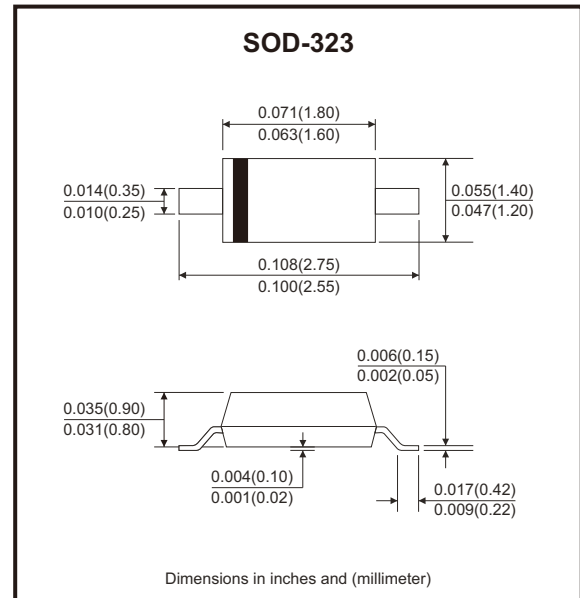


Features

- Fast switching speed.
- High reverse breakdown voltage.
- Low leakage current.
- AEC-Q101 Qualified.

Mechanical data

- Case: SOD-323, molded plastic.
- Molding compound: UL flammability classification rating 94V-0.
- Terminals: Matte tin-plated leads, solderability per MIL-STD-202, method 208.
- Polarity: Cathode line denotes the cathode end.
- Mounting position: Any



Circuit Diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak repetitive peak reverse voltage	V_{RRM}	350	V
Working peak reverse voltage	V_{RWM}	300	V
DC blocking voltage	V_R	300	V
RMS reverse voltage	V_{RMS}	212	V
Forward continuous current	I_O	225	mA
Repetitive peak forward current	I_{FRM}	625	mA
Non-repetitive peak forward surge current @ t = 8.3ms	I_{FSM}	2	A
Power dissipation	P_D	200	mW
Thermal resistance junction to air	$R_{\theta JA}$	625	°C/W
Operating junction temperature range	T_J	-65 to +150	°C
Storage temperature range	T_{STG}	-65 to +150	°C

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

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	$I_R = 150\mu A$	V_{BR}	350			V
Forward voltage	$I_F = 20mA$	V_F		0.78	0.87	V
	$I_F = 100mA$	V_F		0.93	1.00	
	$I_F = 200mA$	V_F		1.03	1.25	
Maximum peak reverse current	$V_R = 240V, T_J = 25^\circ C$	I_R		30	100	nA
	$V_R = 240V, T_J = 150^\circ C$	I_R		35	100	μA
Total capacitance	$V_R = 0V, f = 1MHz$	C_J		2.8	5	pF
Reverse recovery time	$I_F = I_R = 30mA, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$	t_{rr}			50	nS

Typical Rating and Characteristic Curves (ABAV3004WS-HF)

Fig.1 - Typical Reverse Characteristics

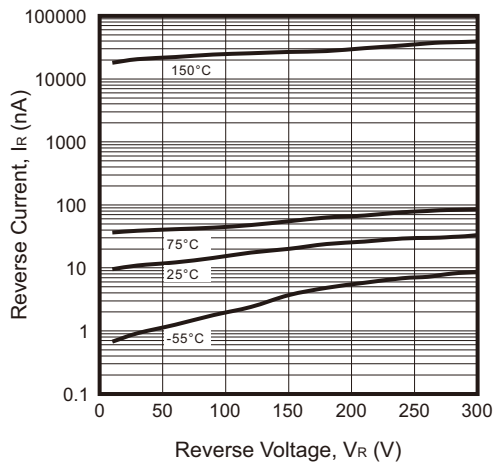


Fig.2 - Typical Forward Characteristics

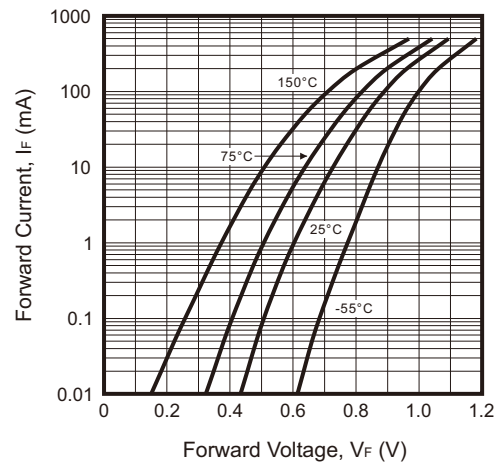


Fig.3 - Capacitance vs. Reverse Voltage

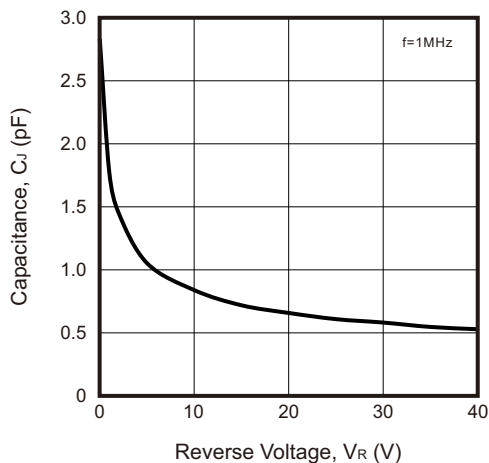
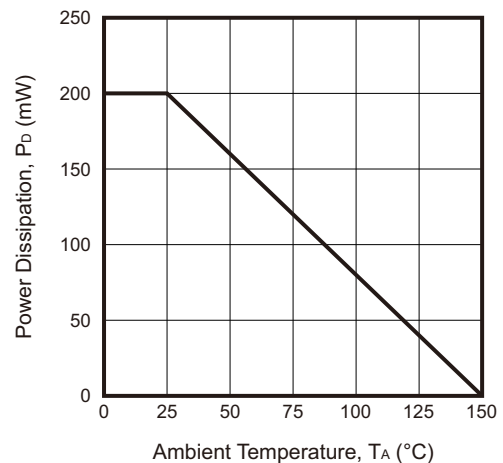
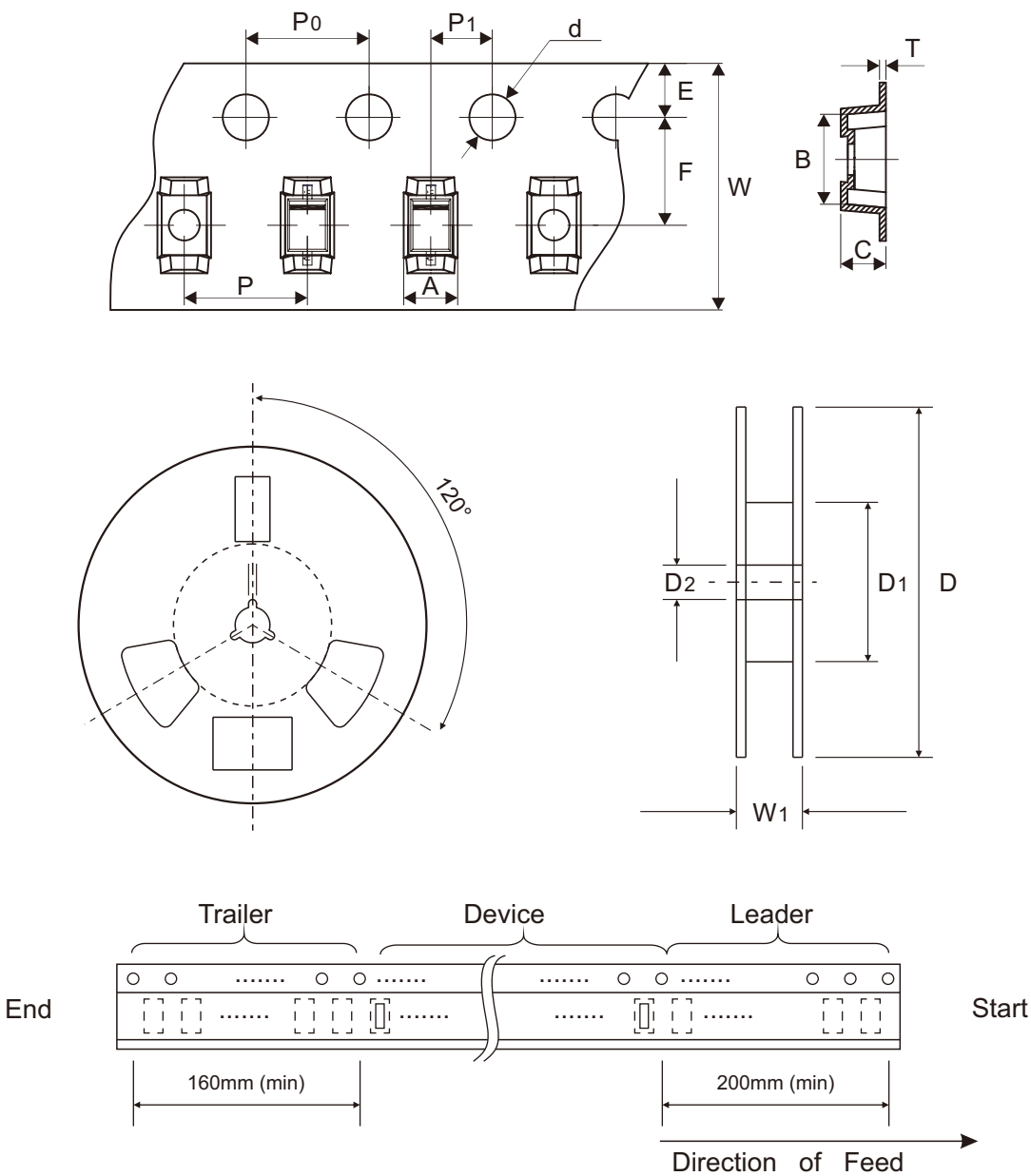


Fig.4 - Power Derating Curve



Reel Taping Specification

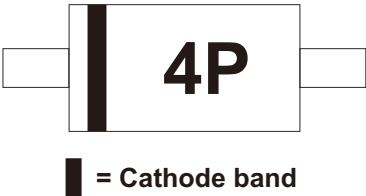


	SYMBOL	A	B	C	d	D	D1	D2
SOD-323	(mm)	1.46 ± 0.05	3.30 ± 0.05	1.25 ± 0.05	$1.50 + 0.10 - 0.00$	178.00 ± 1.00	54.00 ± 0.50	13.00 ± 0.50
	(inch)	0.057 ± 0.002	0.130 ± 0.002	0.049 ± 0.002	$0.059 + 0.004 - 0.000$	7.008 ± 0.039	2.126 ± 0.020	0.512 ± 0.020

	SYMBOL	E	F	P	P0	P1	T	W	W1
SOD-323	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.25 ± 0.02	$8.00 + 0.30 - 0.10$	12.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.010 ± 0.001	$0.315 + 0.012 - 0.004$	0.492 ± 0.039

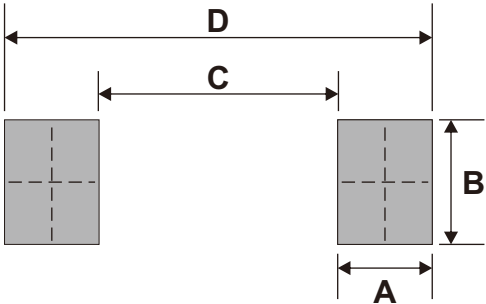
Marking Code

Part Number	Marking Code
ABAV3004WS-HF	4P



Suggested P.C.B. PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	0.63	0.025
B	0.83	0.033
C	1.60	0.063
D	2.85	0.112



Standard Packaging

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