



Features

- Forward Continuous Current: $I_{FM} = 350\text{mA}$
- Power Dissipation of 400mW

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAT48ZFILM	SOD-123	S4	3000



SOD-123



Maximum Ratings (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	40	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_{FM}	Forward Continuous Current	350	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@t=8.3ms	2	A
P_D	Power Dissipation	400	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	250	°C/W
T_j	Junction Temperature	125	°C
T_{stg}	Storage Temperature	-55~+150	°C

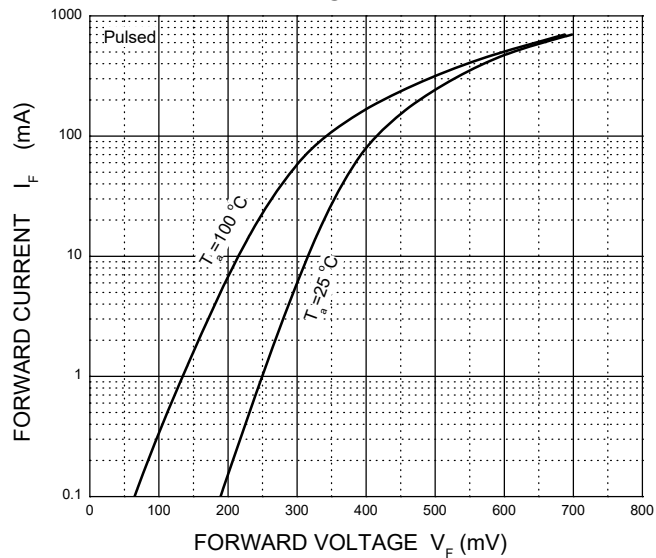
Electrical Characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R = 100\mu A$	40			V
Reverse current	I_R	$V_R = 30V$			5	μA
		$V_R = 20V$			2	
		$V_R = 10V$			1	
Forward voltage	V_F	$I_F = 1mA$		0.27		V
		$I_F = 5mA$		0.32		
		$I_F = 20mA$			0.37	
		$I_F = 200mA$			0.6	
Total capacitance	C_{tot}	$V_R = 0V, f = 1MHz$		50		pF
Reverse recovery time	t_{rr}	$I_F = I_R = 200mA, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$		10		ns

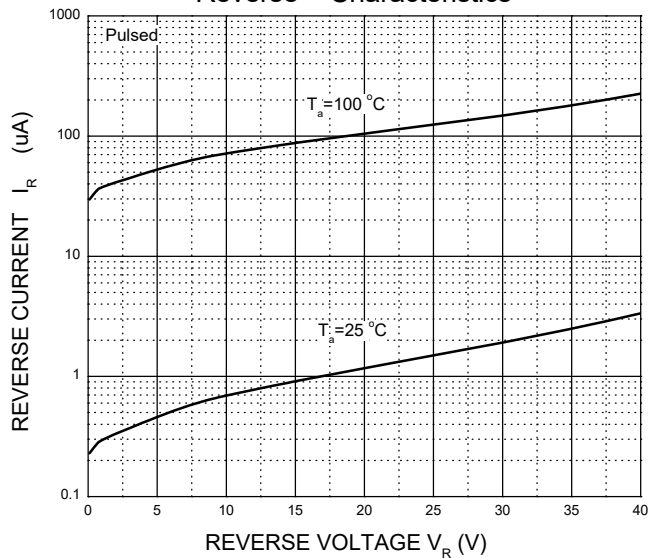


Typical Characteristics

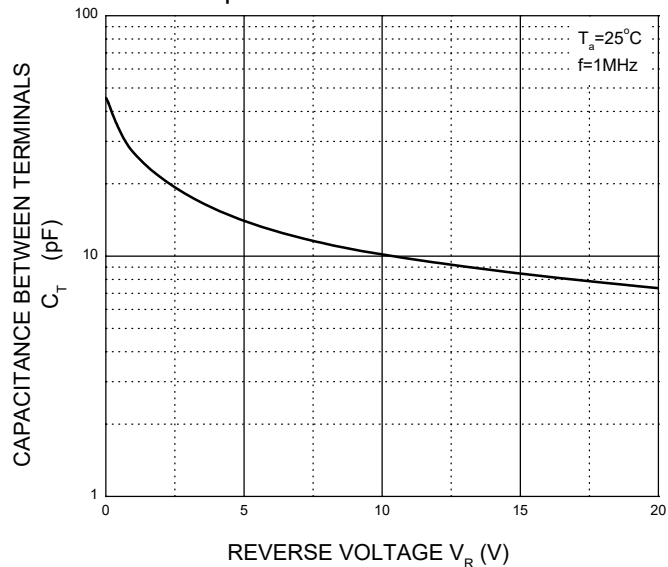
Forward Characteristics



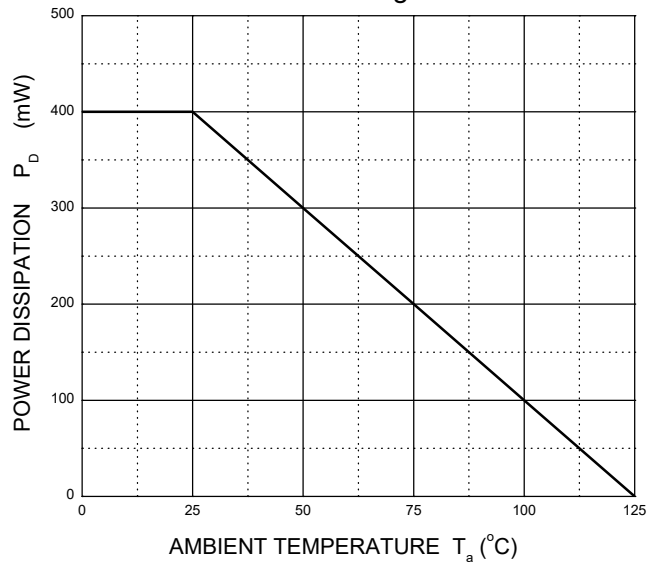
Reverse Characteristics



Capacitance Characteristics

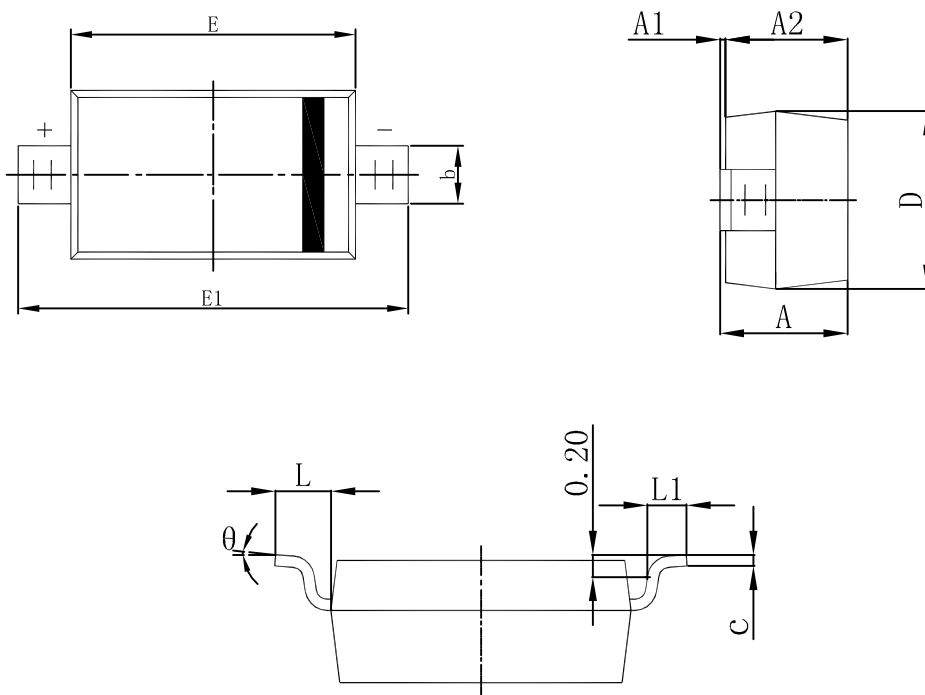


Power Derating Curve





SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°



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