



Features

- Average Rectified Output Current: $I_O = 1A$
- Power Dissipation of 250mW

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAT165E6874HTMA1	SOD-323	SL	3000



SOD-323



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

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	40	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current	I_O	1	A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	9	A
Repetitive Peak Forward Current	I_{FRM}	1.5	A
Power Dissipation	P_D	250	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200	°C/W
Operation Junction Temperature Range	T_J	-40~+125	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

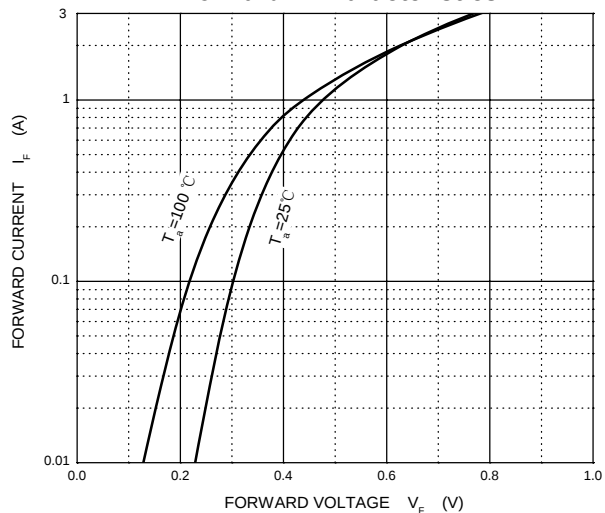
Electrical Characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 1mA$	40		V
Reverse voltage leakage current	I_R	$V_R = 40V$		1	mA
Forward voltage	V_F	$I_F = 1A$ $I_F = 3A$		0.6 0.9	V
Diode capacitance	C_D	$V_R = 4V, f = 1MHz$		120	pF

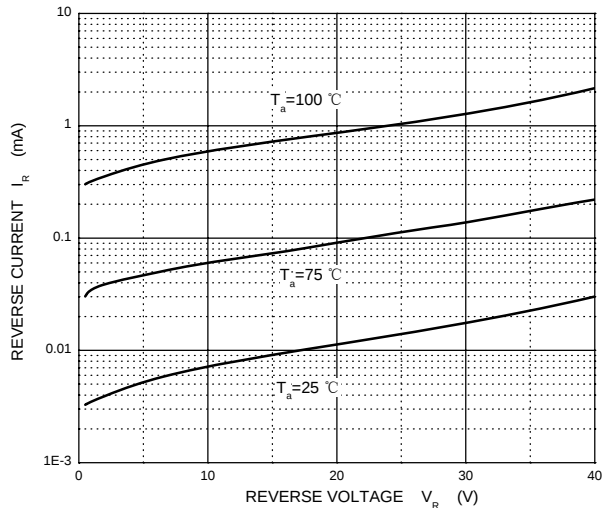


Typical Characteristics

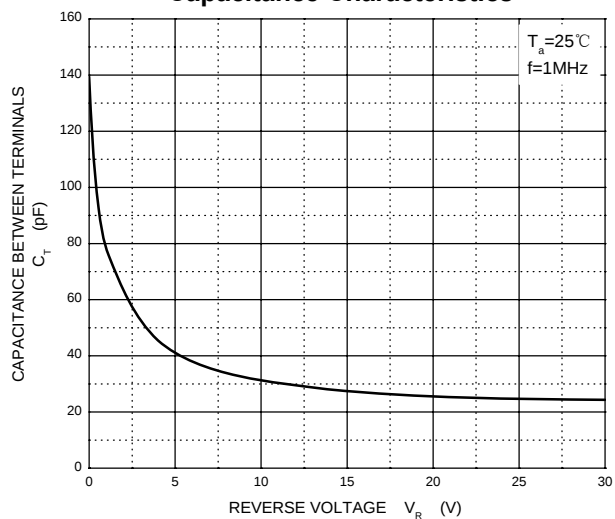
Forward Characteristics



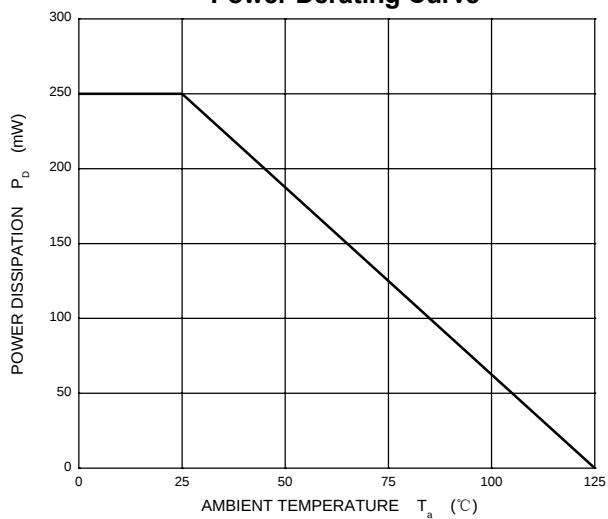
Reverse Characteristics



Capacitance Characteristics

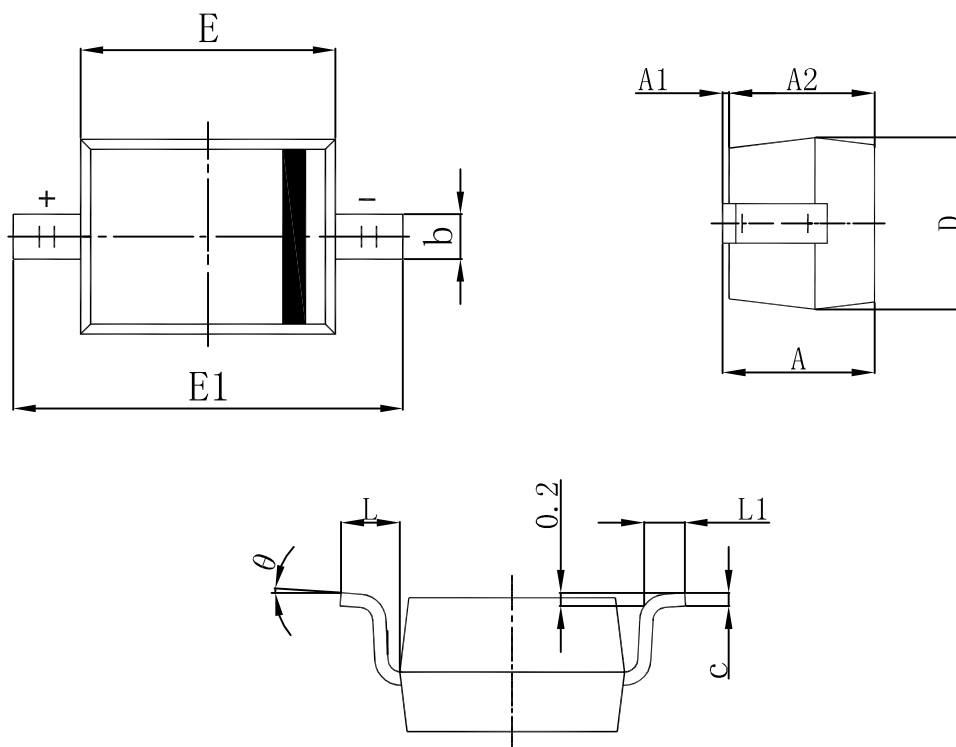


Power Derating Curve





SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°



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