TL-B5817W

SOD-123 SCHOTTKY BARRIER DIODE

Features

- For use in low voltage, high frequency inverters
- Free wheeling, and polarity protection applications.

SOD-123

Equivalent Circuit

Absolute Maximum Ratings(T_A=25℃)

Symbol	Parameter	Value	Uniat
V_{RM}	Non-Repetitive Peak Reverse Voltage	20	V
V_{RRM}	Peak Repetitive Peak Reverse Voltage	20	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	14	V
I_O	Average Rectified Output Current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current@8.3mS	9	A
I_{FRM}	Repetitive Peak Forward Current	1.5	A
P_D	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	℃/W
T_J	Operation Junction Temperature Range	-40 ~ +125	℃
T_{STG}	Storage Temperature Range	-55 ~ +150	℃

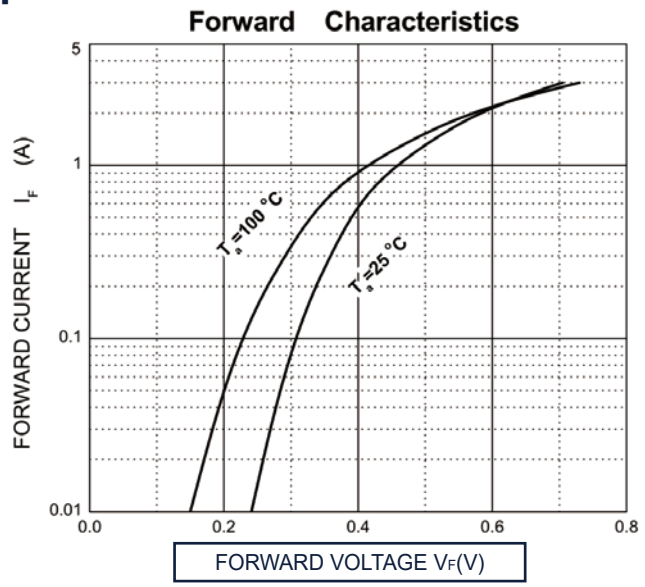
Electrical Characteristics (T_A=25℃ unless otherwise specified)

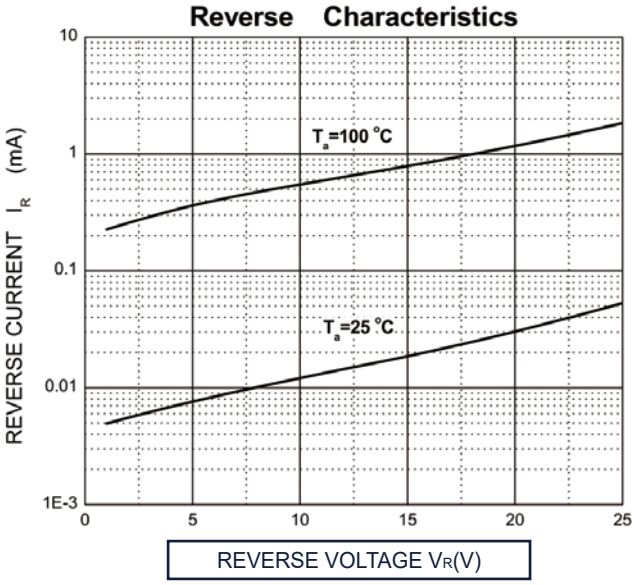
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	I_R=1mA	20			V
I_R	Reverse voltage leakage current	V_R=20V			1	mA
V_F	Forward voltage	I_F=1A			0.45	V
		I_F=3A			0.75	
C_D	Diode capacitance	V_R=4V, f=1.0MHz			120	pF

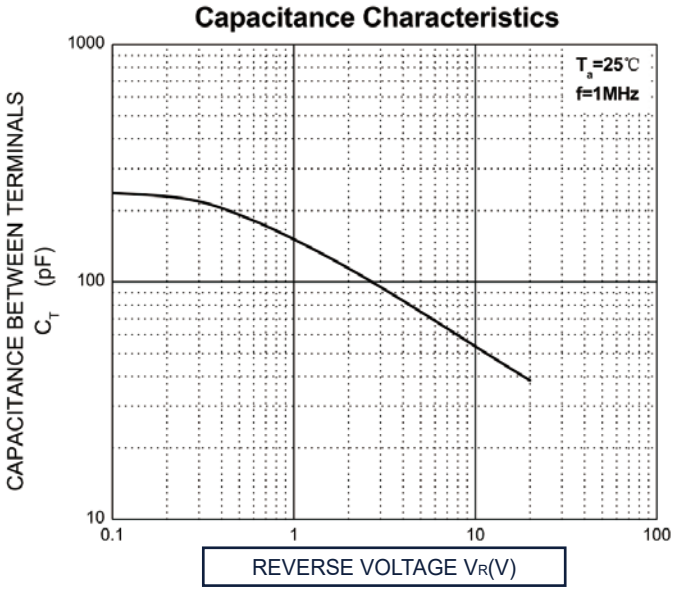
Ordering information

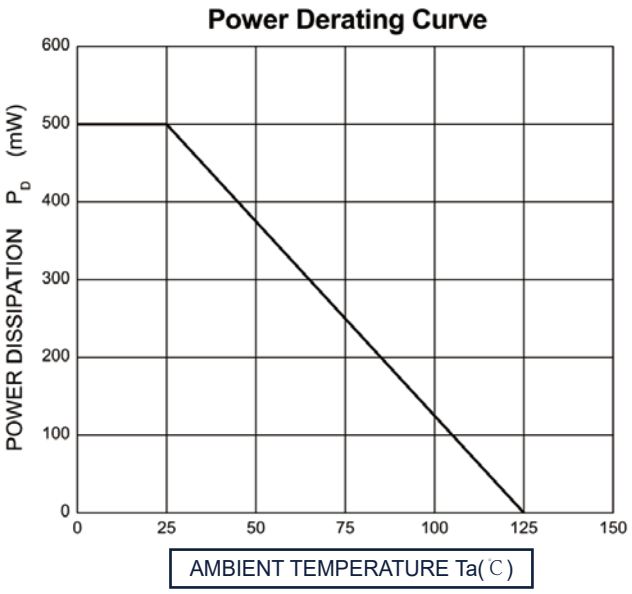
Product ID	Pack	Naming rule	Marking	Qty(PCS)
B5817W	SOD-123	B5817W 产品名称 product name	SJ	3000

Typical Characteristics

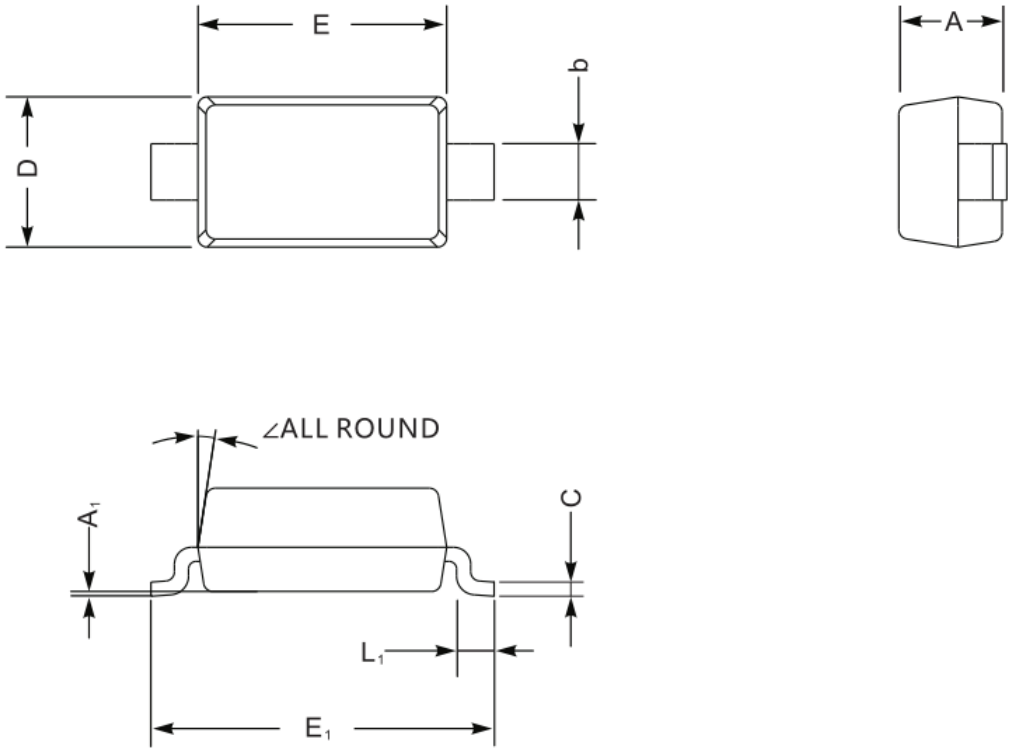








SOD-123 Package Outline Dimensions



Symbol	mm		mil	
	min	max	min	max
A	0.9	1.3	35	51
C	0.09	0.22	3.5	8.7
D	1.5	1.8	59	71
E	2.5	2.8	98	110
E_1	3.6	3.9	142	154
L_1	0.25	0.45	10	18
b	0.5	0.7	20	28
A_1		0.2		8
∠	9°			