

Schottky Barrier Diode

Description

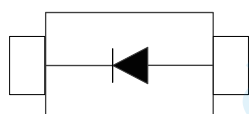
These Schottky barrier diodes are optimized for low forward voltage drop and low leakage current that offers the most optimal power dissipation in applications. They are housed in spacing saving micro-packaging ideal for space constraint applications.

Features

- ✧ Low Forward Voltage Drop
- ✧ Low Reverse Current: 50 μ A (Max.) @ $V_R = 100$ V
- ✧ 1 A of Continuous Forward Current
- ✧ High Response Speed
- ✧ Halogen Free and RoHS Compliant

Applications

- ✧ Low Voltage Rectification
- ✧ Switch Mode Power Supply
- ✧ Dc-Dc Converters
- ✧ Reverse Voltage and Current Protection



Circuit Diagram



SOD323

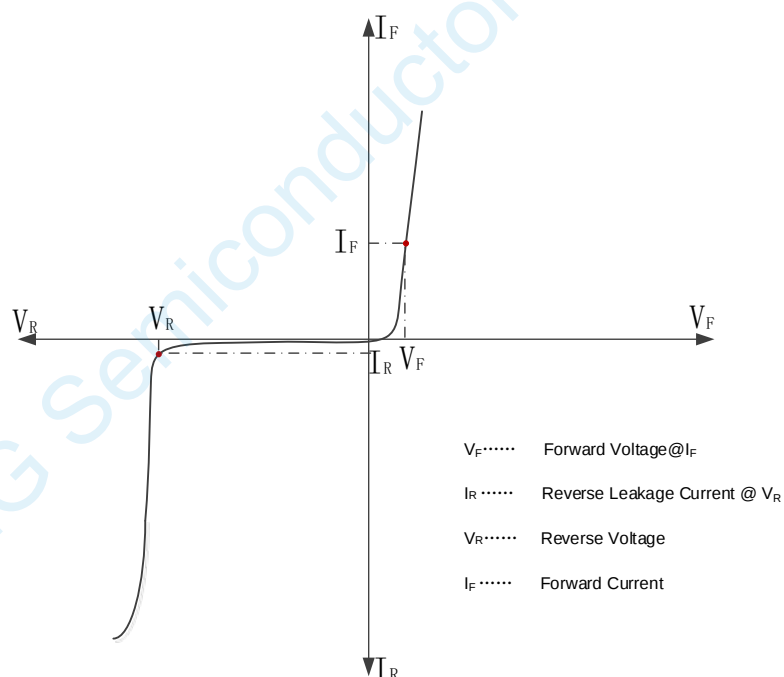
Absolute Maximum Rating ($T_A = 25$ °C, unless otherwise specified)

Parameters	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	VRRM	100	V
Maximum RMS voltage	VRMS	70	V
Maximum DC blocking voltage	VDC	100	V
Maximum average forward rectified current	IFM	1	A
Peak forward surge current 8.3 ms single half sine-wave	IFSM	15	A
Power Dissipation	PD	250	mW
Junction temperature	Tj	125	°C
Storage temperature range	TSTG	-55-+150	°C

Electrical Characteristics ($T_A = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

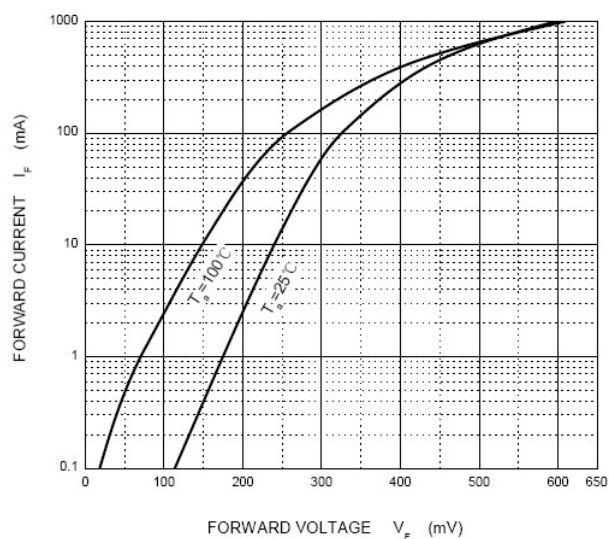
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Maximum Reverse Voltage	V_{BR}	$I_R=50\mu\text{A}$	100			V
Reverse Leakage	I_R	$V_R=100\text{V}$			50	μA
Forward Voltage	V_F	$I_F=1.0\text{A}$			0.85	V

Electrical Parameters ($T_A = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

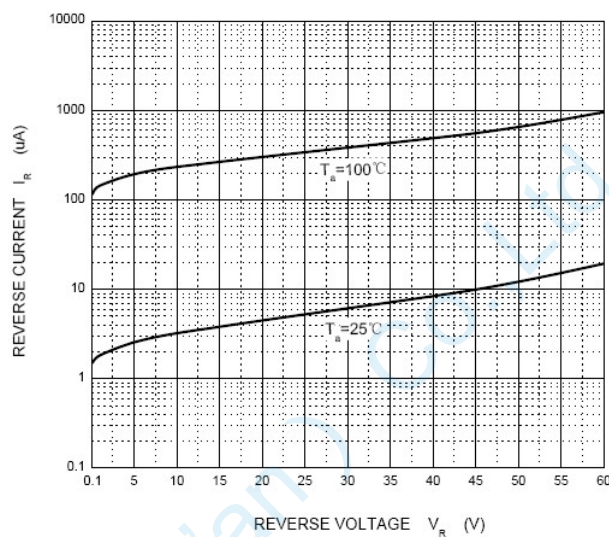


Typical Characteristics ($T_A = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

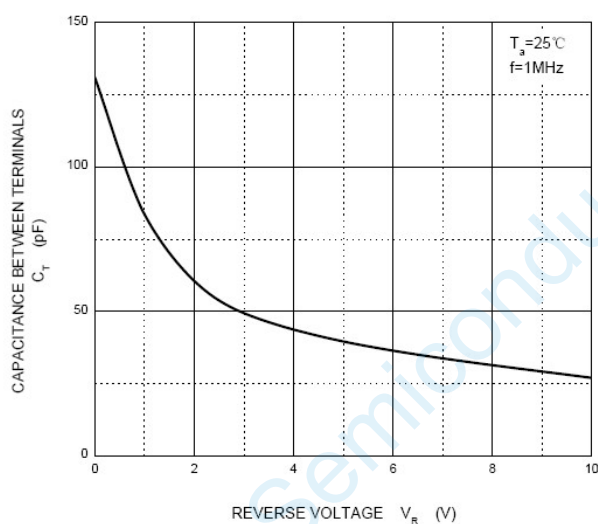
Forward Characteristics



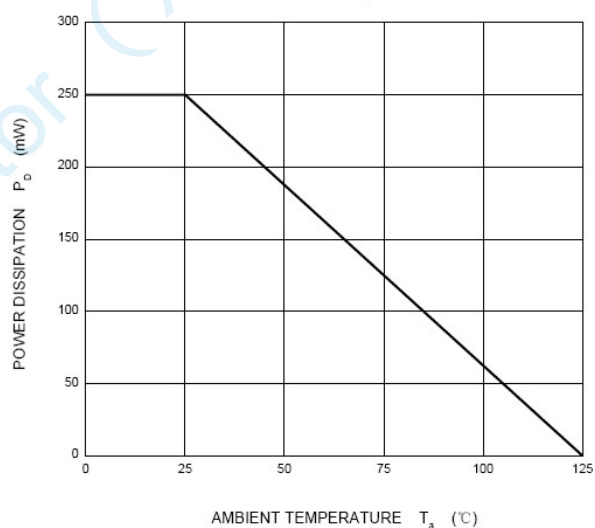
Reverse Characteristics



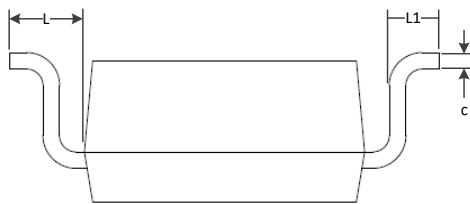
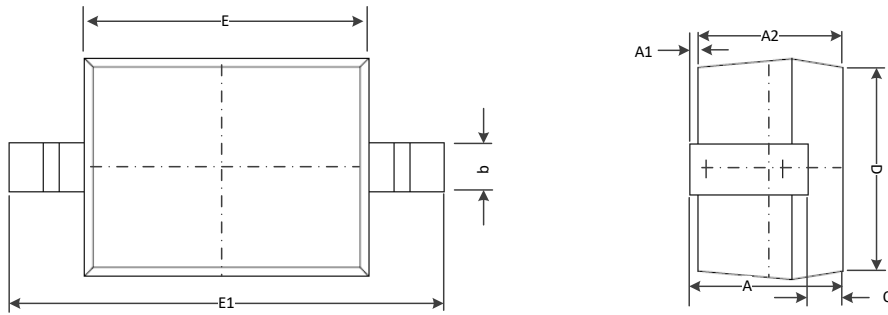
Capacitance Characteristics



Power Derating Curve

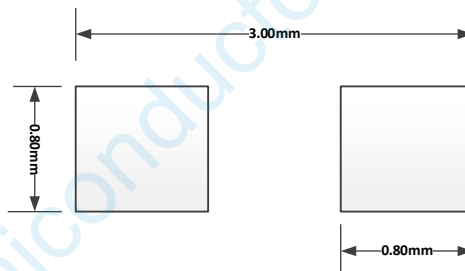


Package Information



COMMON DIMENSION (MM)			
PKG	SOD323		
Symbol	MIN.	NOM.	MAX.
A	0.800	0.900	1.000
A1	0.000	0.050	0.100
A2	0.800	0.850	0.900
b	0.250	0.300	0.350
c	0.080	-	0.150
D	1.200	1.300	1.400
E	1.600	1.700	1.800
E1	2.500	2.600	2.700
L	0.475 REF		
L1	0.250	0.260	0.400
Q	0.250 REF		

Recommend PCB Layout



Notes: This PCB Layout Is For Reference Purposes Only

Marking



Ordering Information

Part number	Material	Type	Reel size	MOQ	MOQ/internal box	MOQ/carton
OVB110WS	GREEN	T/R	7 inch	3k/reel	10reel= 30k/box	4boxes=120k/carton