

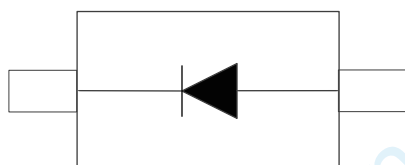
High-speed Switching Diode

Description

The OVW4148D1 is a high-speed switching diode fabricated in planar technology, and encapsulated in a small SOD323 plastic SMD package.

Features

- ✧ High switching speed: max. 6 ns
- ✧ Continuous reverse voltage: max. 75 V
- ✧ Repetitive peak reverse voltage: max. 100 V
- ✧ Repetitive peak forward current: max. 300 mA.



Circuit Diagram

Applications

- ✧ High-speed switching in hybrid thick and thin-film circuits.



SOD323

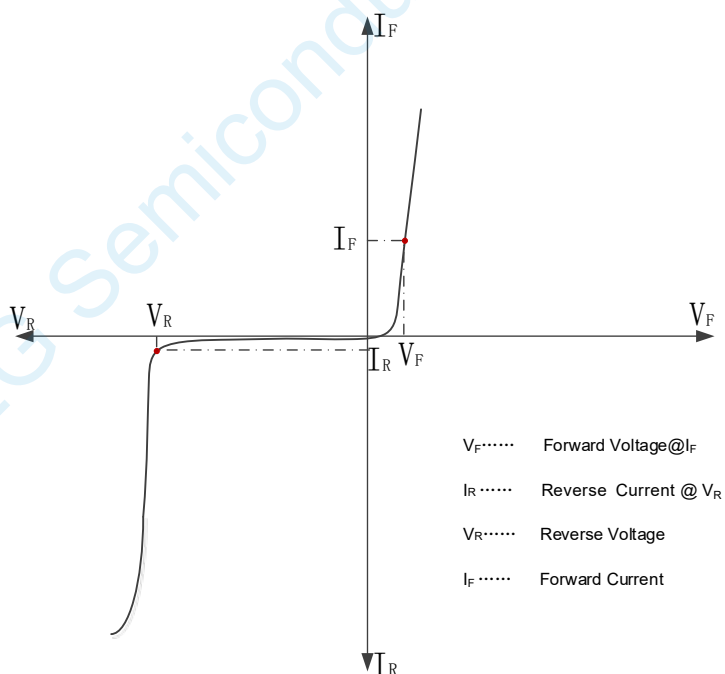
Absolute Maximum Rating ($T_A = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

Rating	Symbol	Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	300	mA
Junction temperature	T_j	150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55~+150	$^{\circ}\text{C}$

Electrical Characteristics (T_A = 25 °C, unless otherwise specified)

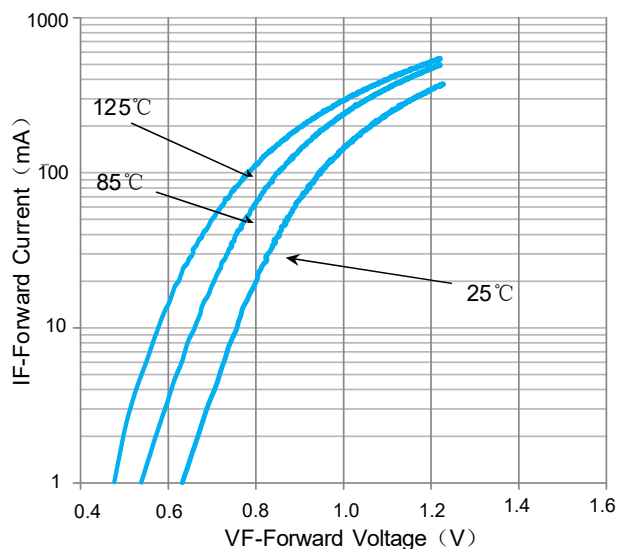
Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Breakdown Voltage	V _{BR}	I _R =0.1mA	100	140		V
Reverse Current	I _{R1} I _{R2}	V _{R1} =20V V _{R2} =75V		10 20	25 500	nA
Forward Voltage	V _F	I _F =5mA I _F =10mA I _F =100mA I _F =150mA			0.72 0.86 1.00 1.25	V
Total Capacitance	C _T	V _R =0V,f=1MHz			2	pF
Reverse Recovery Time	t _{rr}	I _F = I _R = 10mAdc I _{R(REC)} = 1.0 mAdc			6	ns

Electrical Parameters (T_A = 25 °C, unless otherwise specified)

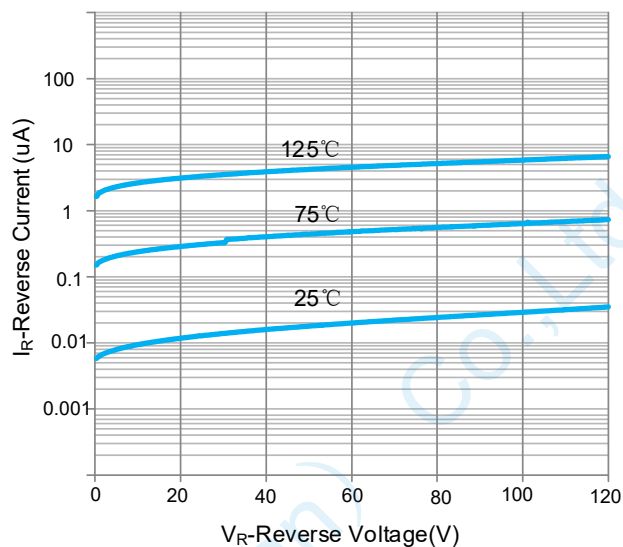


Typical Characteristics (T_A = 25 °C, unless otherwise specified)

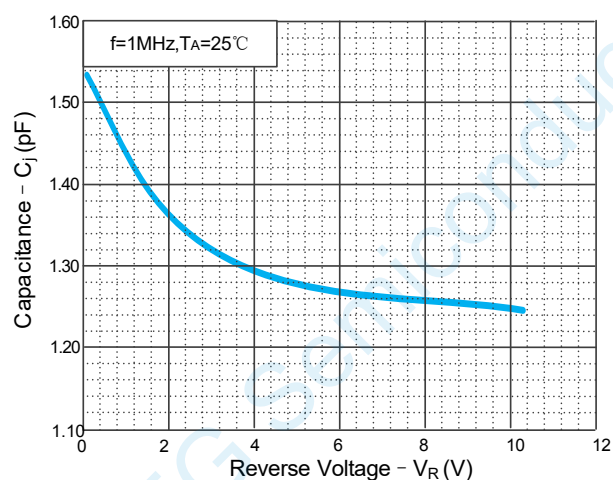
Forward Current vs. Forward Voltage



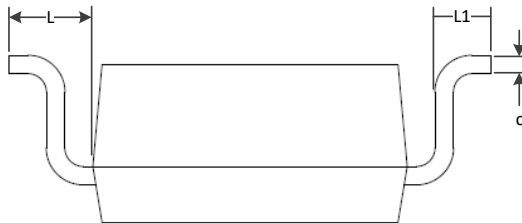
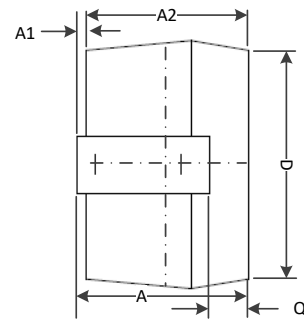
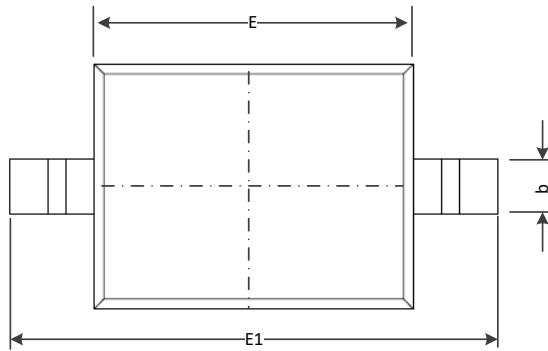
Reverse Characteristic



Capacitor Characteristics

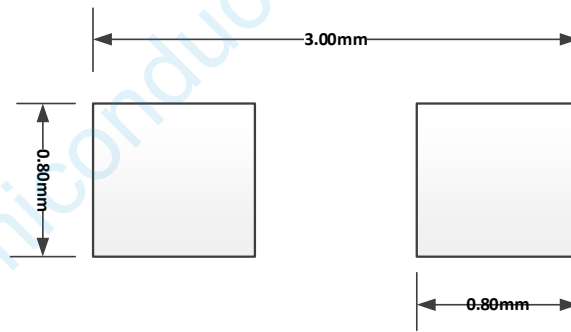


Package Information



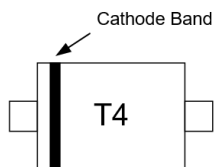
COMMON DIMENSION (MM)			
PKG	SOD323		
Symbol	MIN.	NOM.	MAX.
A	0.800	0.900	1.000
A1	0.000	0.050	0.100
A2	0.800	0.850	0.900
b	0.250	0.300	0.350
c	0.080	-	0.150
D	1.200	1.300	1.400
E	1.600	1.700	1.800
E1	2.500	2.600	2.700
L	0.475 REF		
L1	0.250	0.260	0.270
Q	0.250 REF		

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
OVW4148D1	GREEN	T/R	7 inch	3k/reel	10reel= 30k/box	4boxes=120k/carton