Low V_F Schottky Barrier Diode

Description

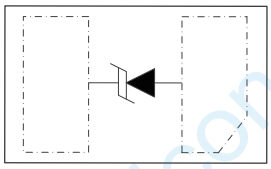
These Schottky barrier diodes are optimized for low forward voltage drop and low leakage current that offers the most optimal power dissipation in applications. They are housed in spacing saving micro−packaging ideal for space constraint applications.

Features

- ✧ Low Forward Voltage Drop: 500 mV (Max.) @ I_F = 200 mA
- ✧ Low Reverse Current: − 0.5 μA (Typ.) @ V_R = 10 V
- ✧ 200 mA of Continuous Forward Current
- ✧ High Switching Speed
- ✧ Pb−Free, Halogen Free/BFR Free and RoHS Compliant

Applications

- ✧ Low current rectification
- ✧ Camera Photo Flash
- ✧ Buck and Boost dc−dc Converters
- ✧ Reverse Voltage and Current Protection



Circuit Diagram



DFN1006

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

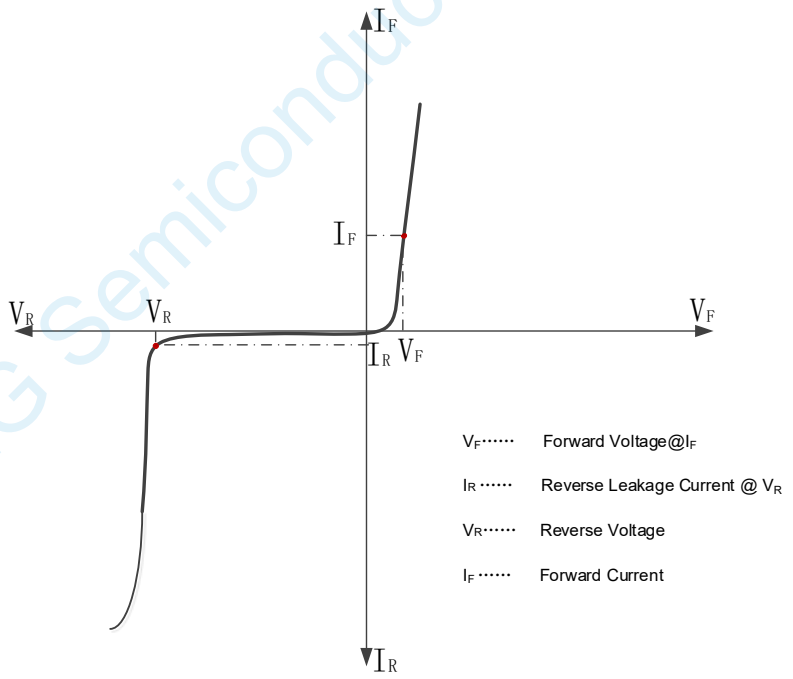
Rating	Symbol	Value	Units
Reverse Voltage (DC)	V_R	30	V
Forward Current (DC)	I_F	200	mA
Forward Surge Current (60 Hz @ 1 cycle)	I_{FSM}	500	mA
Junction temperature	Tj	125	℃
Storage temperature	T_{stg}	-40~+150	℃

OVREG Semiconductor （xi'an） Co.,Ltd.

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

Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Leakage	I_R	V_R=10V		0.5	2.0	μA
Forward Voltage	V_F	I_F=10mA I_F=20mA I_F=100mA I_F=200mA		0.30 0.32 0.40 0.48	0.33 0.36 0.43 0.50	V
Total Capacitance	C_T	V_R = 10V, f = 1MHz		15		pF
Reverse Recovery Time	t_{rr}	I_F = I_R = 10mAdc $I_{R(REC)}$ = 1.0 mAdc			5.0	ns

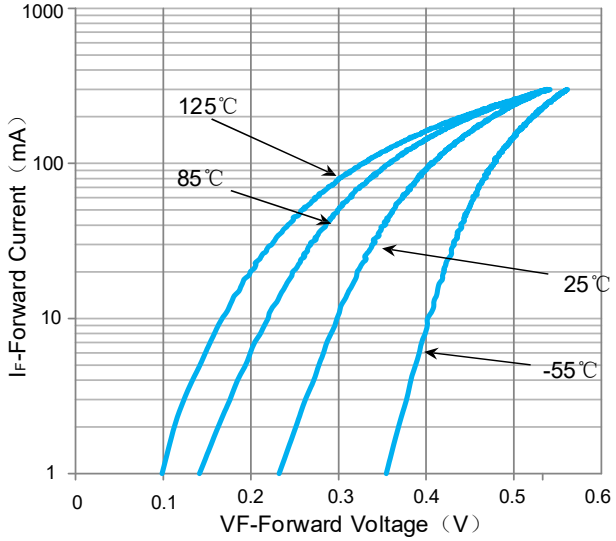
Electrical Parameters （T_A = 25 °C, unless otherwise specified）



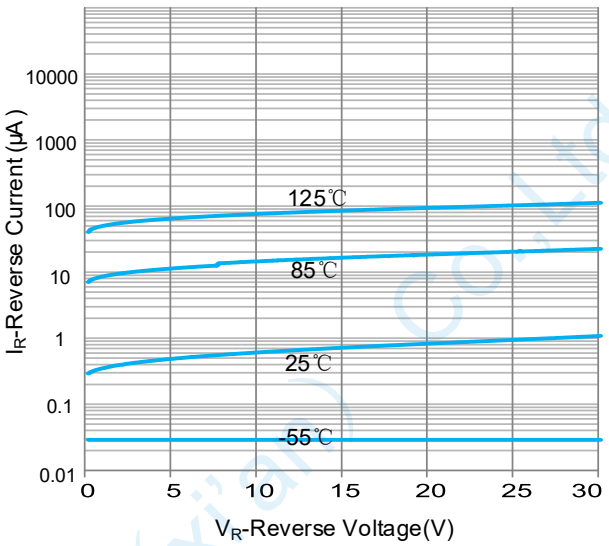
OVREG Semiconductor (xi'an) Co.,Ltd.

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

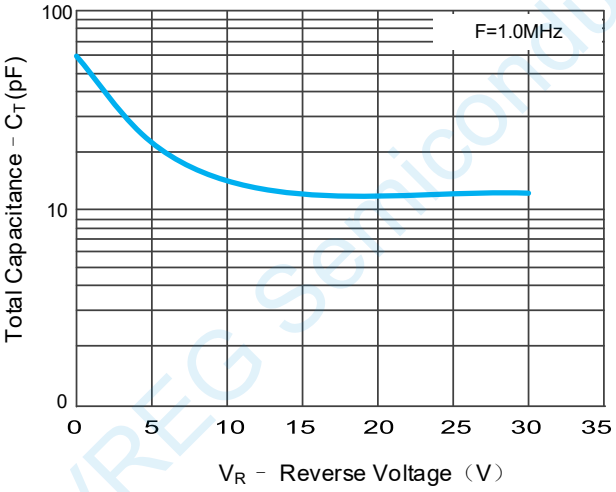
Forward Current vs. Forward Voltage



Reverse Characteristic

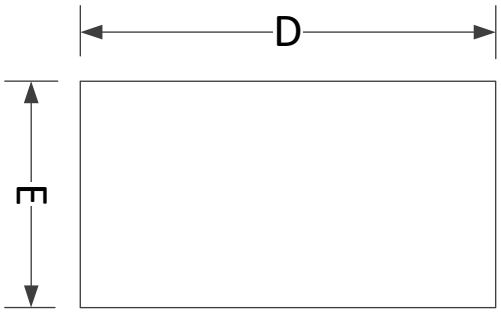


Capacitor Characteristics

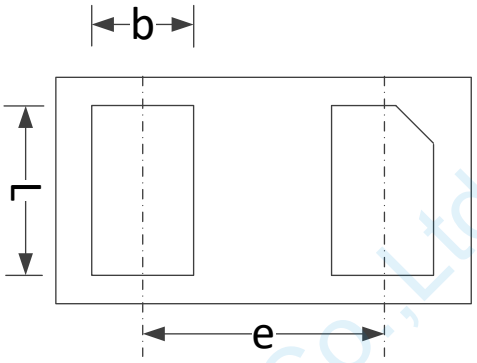


OVREG Semiconductor (xi'an) Co.,Ltd.

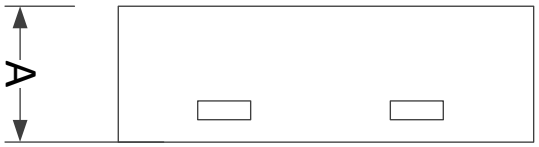
Package Information



TOP VIEW



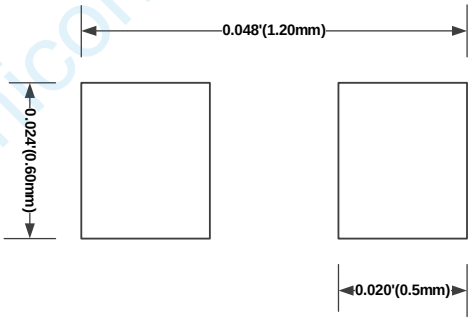
BOTTOM VIEW



SIDE VIEW

COMMON DIMENSION (MM)			
PKG	DFN1006		
REF.	MIN.	NOM.	MAX.
A	0.43	-	0.53
b	0.20	0.25	0.30
L	0.45	0.50	0.55
e	0.65REF		
D	0.95	1.00	1.05
E	0.55	0.60	0.65

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
OVB32TL32AGA	GREEN	T/R	7 inch	12k/reel	10reel= 120k/box	4boxes=480k/carton

OVREG Semiconductor (xi'an) Co.,Ltd.