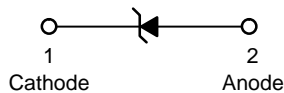


Trench MOS Barrier Schottky Rectifier



SOD-123FL



Features

- Advanced trench technology
- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

Applications

- DC/DC Converters
- AC/DC Adaptors

Maximum ratings and electrical characteristics (T_J = 25°C unless otherwise noted)

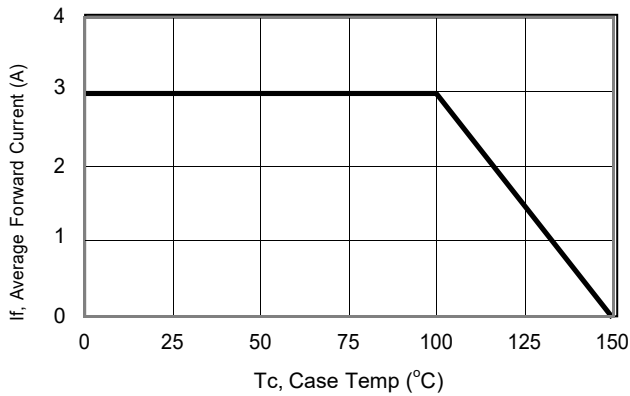
Parameter		Symbol	Limit		Unit	
Maximum repetitive peak reverse voltage		V _{RRM}	40		V	
Maximum average forward rectified current		I _{F(AV)}	3		A	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode		I _{FSM}	55		A	
Operating junction and storage temperature range		T _J , T _{STG}	-55 to +150		°C	
Typical thermal resistance per diode (Mounted on FR-4 PCB)		R _{θJC}	150		°C/W	
Instantaneous forward voltage	I _F =3A	T _J =25°C	TYP.	MAX.	V	
			0.44	0.48		
	I _F =3A	T _J =125°C	0.39	-		
Instantaneous reverse current per diode at rated reverse voltage	T _J =25°C		I _{R(2)}	80	-	μA
	T _J =125°C			20	-	mA

Notes:

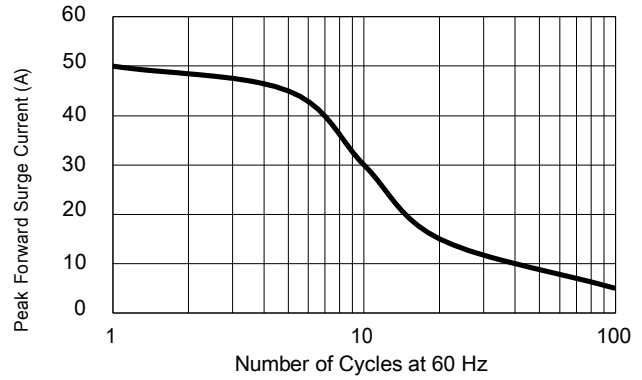
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≦ 40 ms

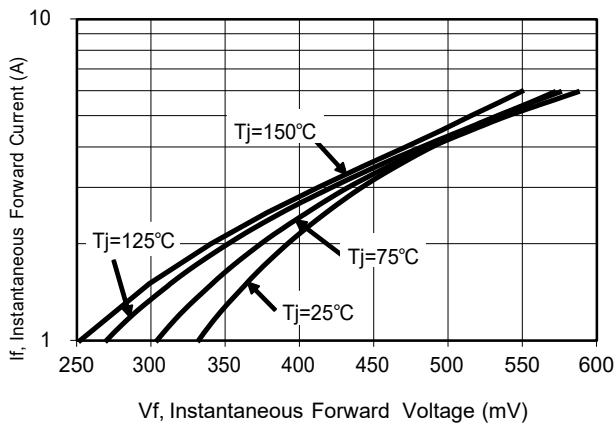
RATINGS AND CHARACTERISTICS CURVES



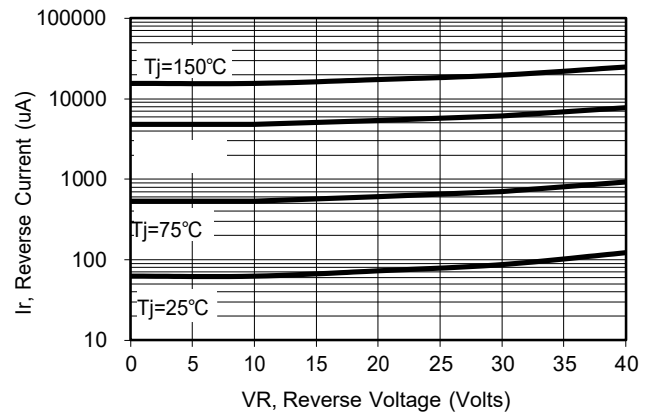
Current Derating, Case



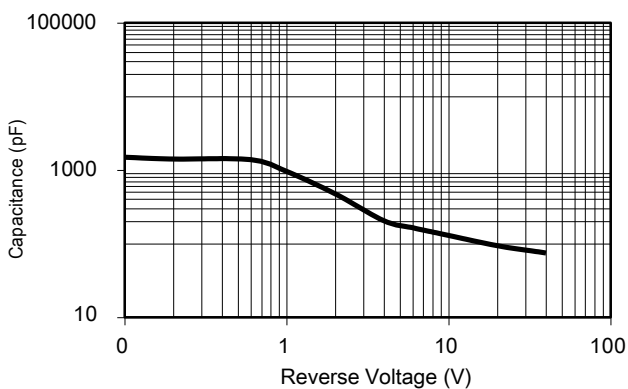
Maximum Repetitive Surge Current



Typical Forward Voltage



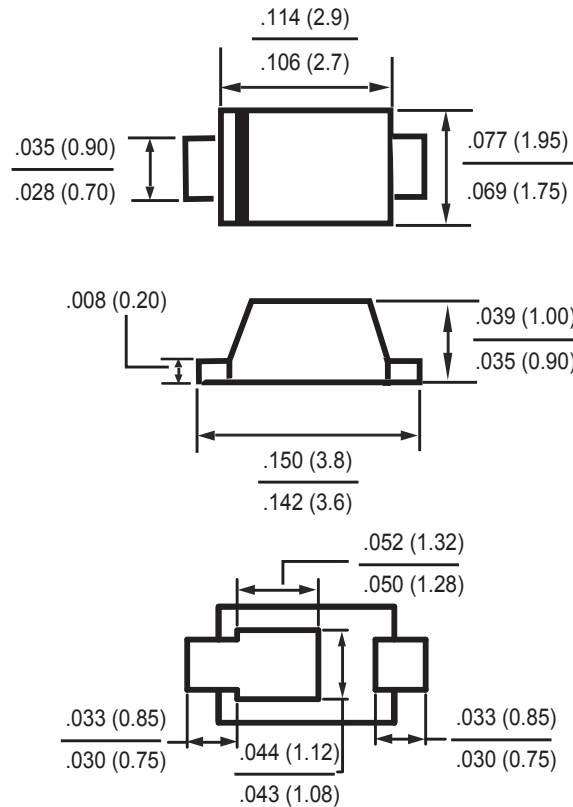
Typical Reverse Current



Typical Junction Capacitance

PACKAGE OUTLINE

SOD-123FL



Dimensions in inches and (millimeters)