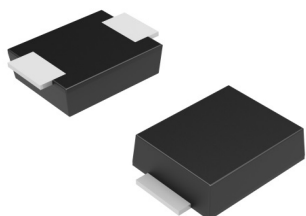


10L100SB SMBF

Trench MOS Barrier Schottky Rectifier

SMB-FL
10L100SB



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)

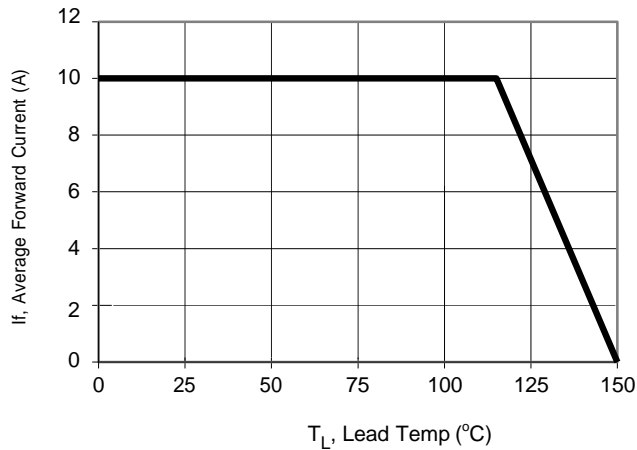
Parameter		Symbol	Limit		Unit	
Maximum repetitive peak reverse voltage		V _{RRM}	100		V	
Maximum average forward rectified current		I _{F(AV)}	10		A	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode		I _{FSM}	140		A	
Operating junction and storage temperature range		T _J , T _{STG}	-40 to +150		°C	
Typical thermal resistance per diode(Mounted on FR-4 PCB)		R _{θJA}	20		°C/W	
Instantaneous forward voltage per diode	I _F =5A	T _J =25°C	TYP.	MAX.	V	
		T _J =125°C	0.59	-		
	I _F =10A	T _J =25°C	0.53	-		
		T _J =125°C	0.75	0.79		
				0.65		0.69
Instantaneous reverse current per diode at rated reverse voltage	T _J =25°C		I _{R(2)}	5	100	uA
	T _J =125°C			7	20	mA

Notes:

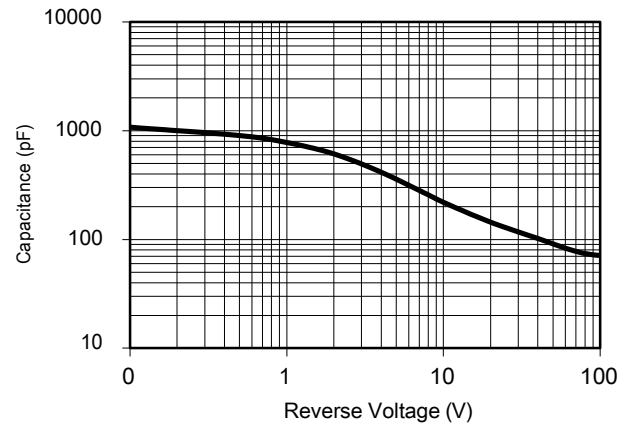
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

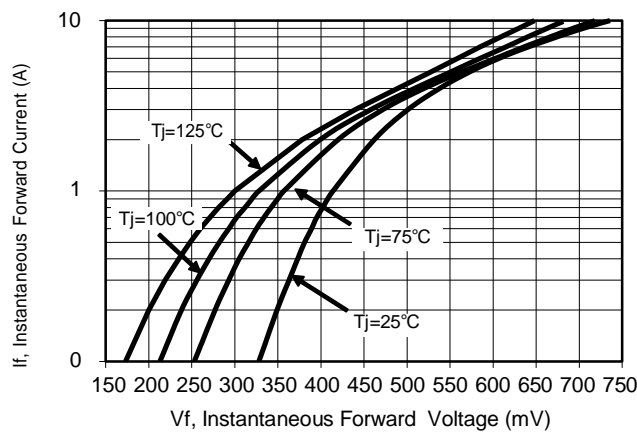
TYPICAL RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



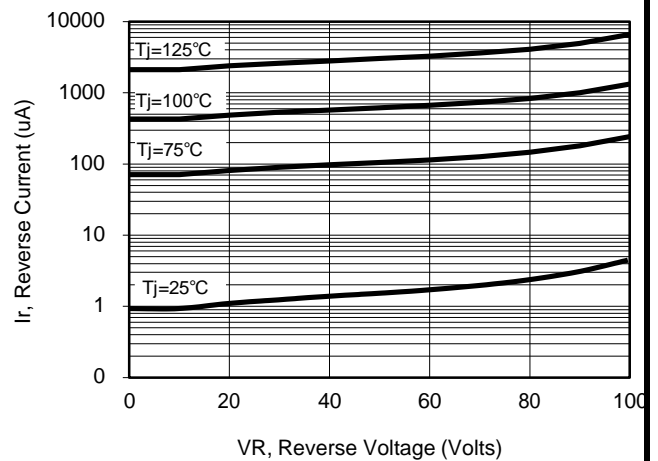
Current Derating, Case



Typical Junction Capacitance



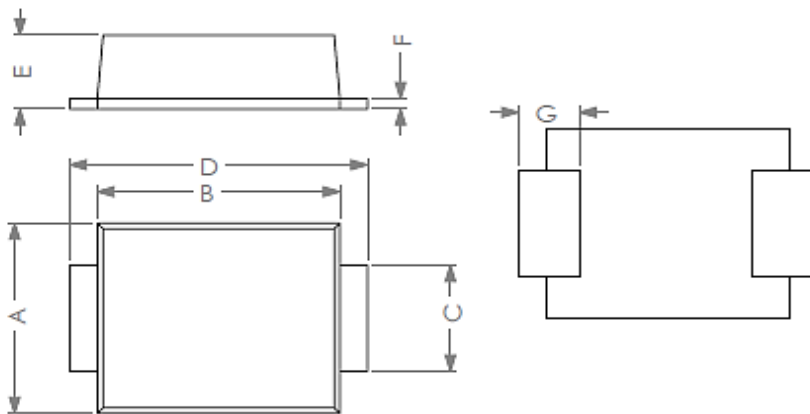
Typical Forward Voltage



Typical Reverse Current

PACKAGE OUTLINE

SMB-FL



Dim	Min	Max
A	3.55	3.75
B	4.35	4.55
C	1.95	2.15
D	5.35	5.55
E	1.35	1.55
F	0.15	0.25
G	1.10	1.30

unit:mm