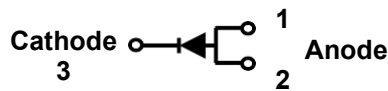
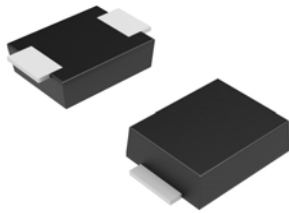


## Trench MOS Barrier Schottky Rectifier

**SMB-FL**  
**8L60SB**



### 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<sub>J</sub> = 25°C unless otherwise noted)

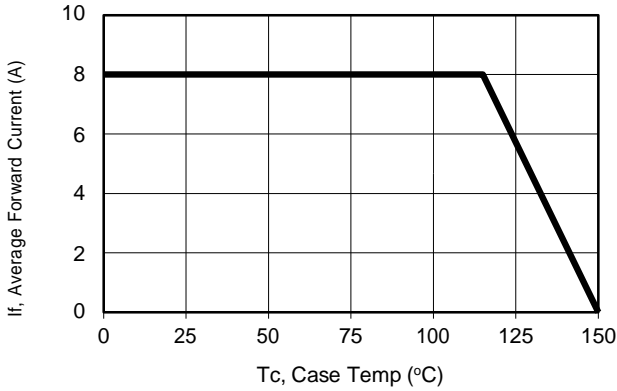
Parameter		Symbol	Limit		Unit
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	60		V
Maximum average forward rectified current		I <sub>F(AV)</sub>	8		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode		I <sub>FSM</sub>	200		A
Operating junction and storage temperature range		T <sub>J</sub> , T <sub>STG</sub>	-65 to +150		°C
Typical thermal resistance per diode (Mounted on FR-4 PCB)		R <sub>θJL</sub>	20		°C/W
Instantaneous forward voltage	I <sub>F</sub> =2A	V <sub>F(1)</sub>	TYP.	MAX.	V
	I <sub>F</sub> =2A		0.4	-	
	I <sub>F</sub> =8A		0.29	-	
	I <sub>F</sub> =8A		0.51	0.53	
Instantaneous reverse current per diode at rated reverse voltage	T <sub>J</sub> =25°C	I <sub>R(2)</sub>	-	30	uA
	T <sub>J</sub> =125°C		-	10	mA

Notes:

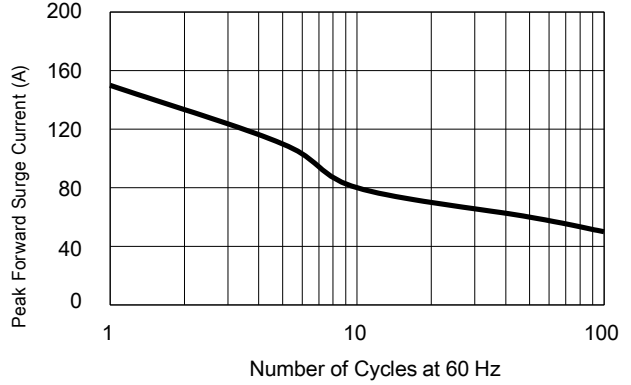
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≦ 40 ms

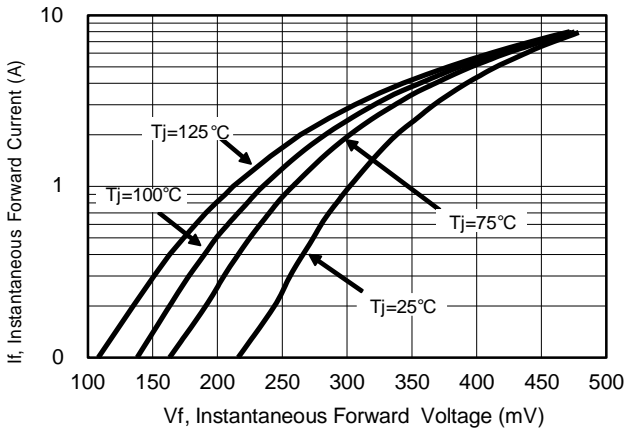
**RATINGS AND CHARACTERISTICS CURVES** (TA = 25 °C unless otherwise noted)



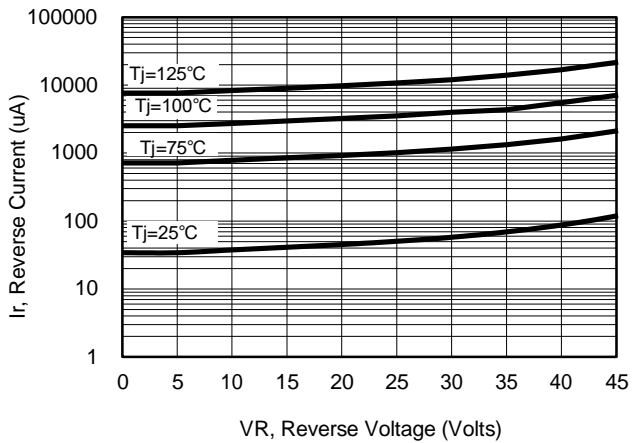
**Current Derating, Case**



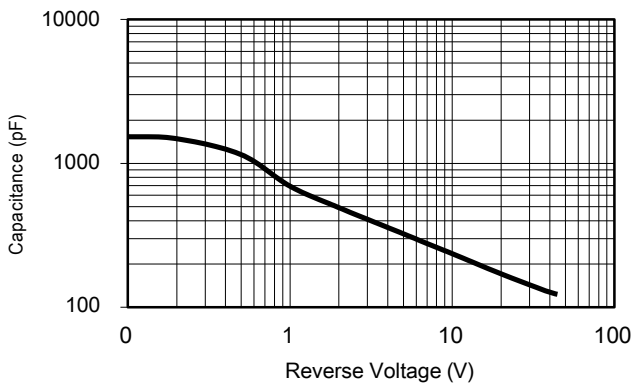
**Maximum Repetitive Surge Current**



**Typical Forward Voltage**



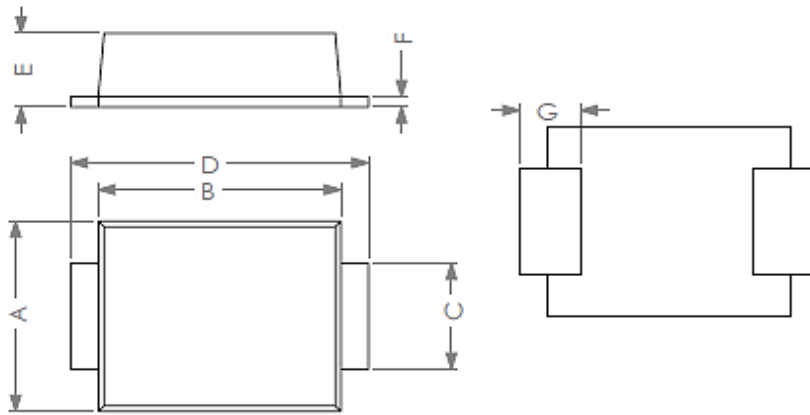
**Typical Reverse Current**



**Typical Junction Capacitance**

**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