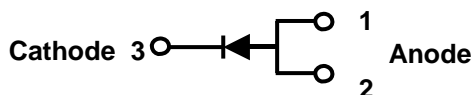
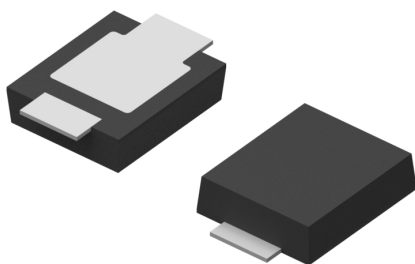


Trench MOS Barrier Schottky Rectifier

SMC-S



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}	45		V
Maximum average forward rectified current		I _{F(AV)}	15		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode		I _{FSM}	240		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 _{θJL}	15		°C/W
Instantaneous forward voltage	I _F =2A	T _J =25°C	TYP.	MAX.	V
			0.34	-	
	I _F =15A	T _J =125°C	0.51	0.55	
			0.22	-	
I _F =2A	T _J =125°C	0.38	-		
		-	-		
Instantaneous reverse current per diode at rated reverse voltage	T _J =25°C	I _{R(2)}	-	100	uA
	T _J =125°C		-	50	mA

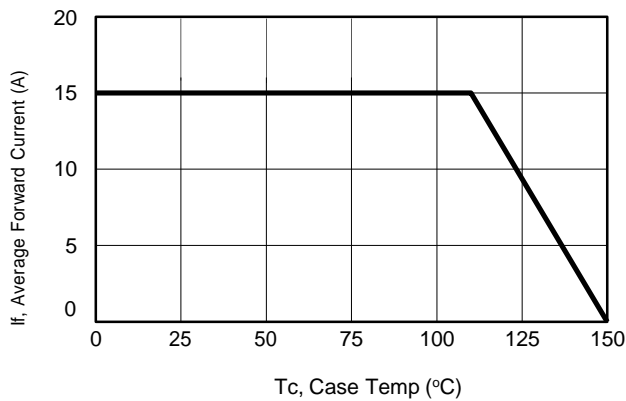
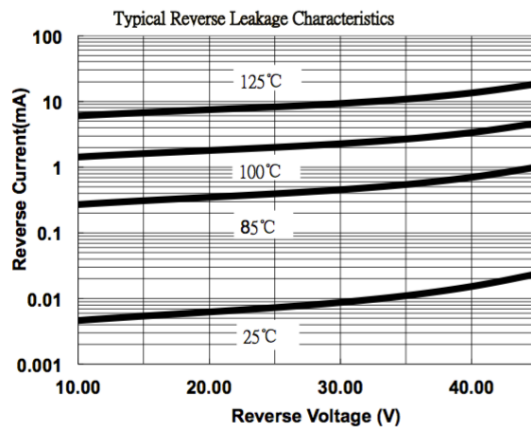
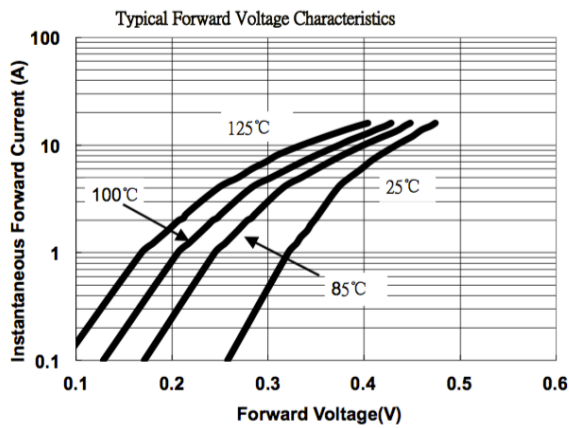
Notes:

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

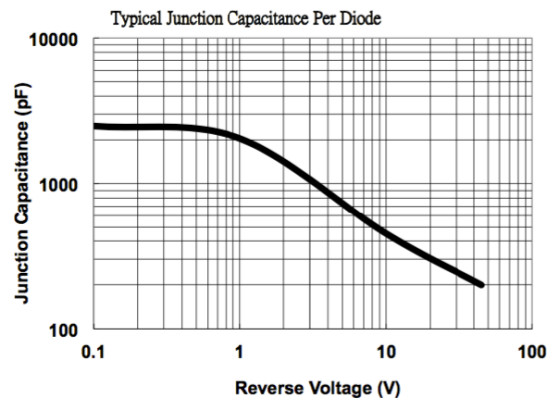
(2) Pulse test: Pulse width ≤ 40 ms

RATINGS AND CHARACTERISTICS CURVES

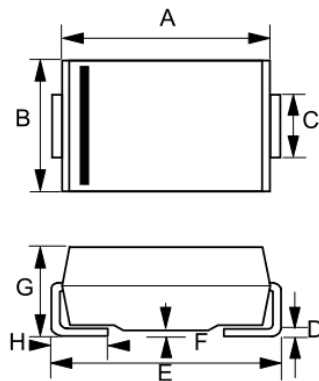
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



Current Derating, Case



PACKAGE OUTLINE



SMC		
DIM.	MIN.	MAX.
A	6.60	7.11
B	5.59	6.22
C	2.92	3.18
D	0.15	0.31
E	7.75	8.13
F	0.05	0.20
G	2.01	2.50
H	0.76	1.52

All Dimensions in millimeter