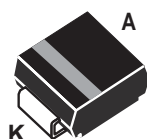


Trench MOS Barrier Schottky Rectifier

TSP10L80B SMB



Cathode  Anode

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
- Switching Power Supplies
- Freewheeling Diodes

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

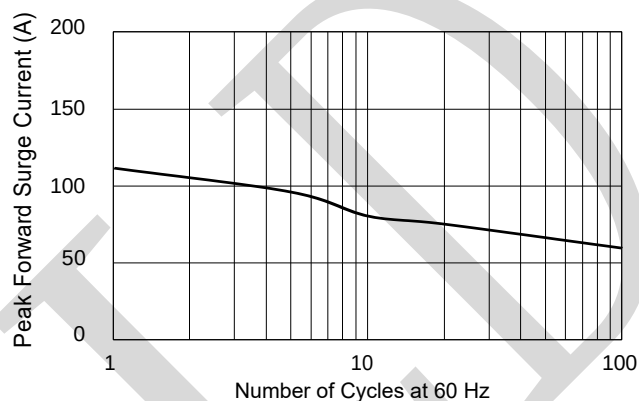
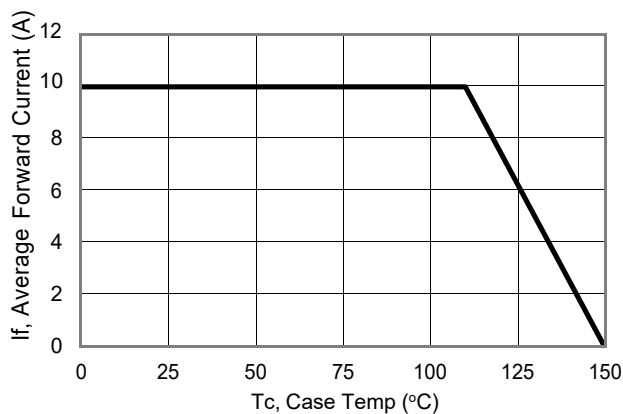
Parameter		Symbol	Limit		Unit
Maximum repetitive peak reverse voltage		VRRM	85		V
Maximum average forward rectified current		IF(AV)	10		A
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode		IFSM	110		A
Operating junction and storage temperature range		TJ, TSTG	-50 to +150		°C
Typical thermal resistance per leg	DO-201AD	RθJC	22		°C/W
Instantaneous forward voltage per diode			TYP.	MAX.	V
	IF=2A	TJ=25°C	0.44	0.47	
	IF=2A	TJ=125°C	0.39	-	
	IF=10A	TJ=25°C	0.60	0.65	
	IF=10A	TJ=125°C	0.55	-	
Instantaneous reverse current per diode at rated reverse voltage	TJ=25°C		-	30	uA
	TJ=125°C		-	20	mA

Notes:

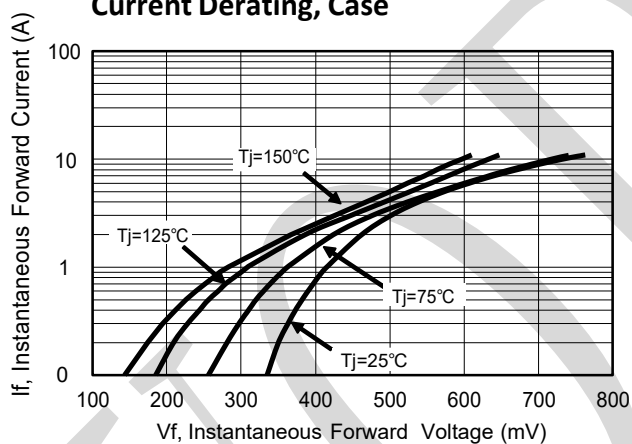
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

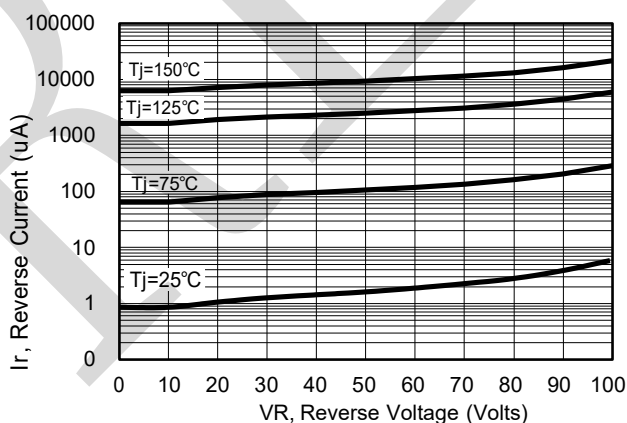
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



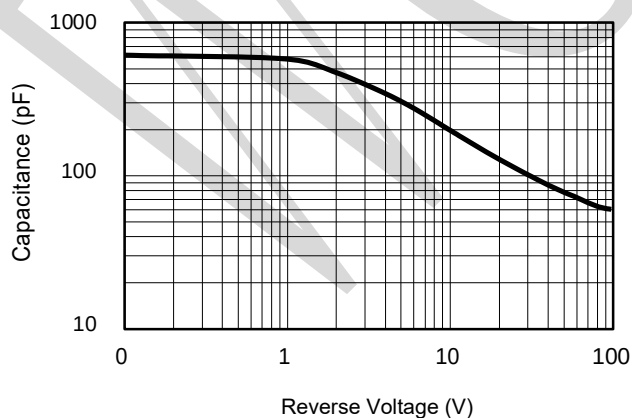
Current Derating, Case



Maximum Repetitive Surge Current



Typical Forward Voltage

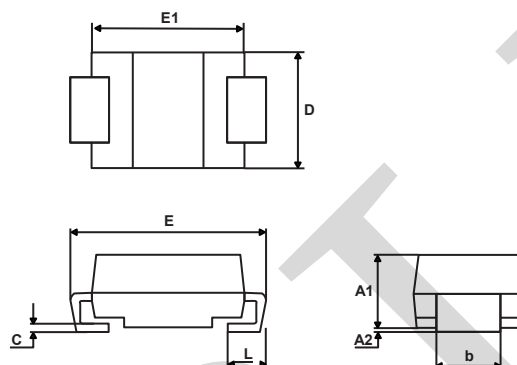


Typical Reverse Current

Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS

SMB dimension definitions



SMB dimension values

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A1	1.90	2.45	0.075	0.096
A2	0.05	0.20	0.002	0.008
b	1.95	2.20	0.077	0.087
c	0.15	0.40	0.006	0.016
D	3.30	3.95	0.130	0.156
E	5.10	5.60	0.201	0.220
E1	4.05	4.60	0.159	0.181
L	0.75	1.50	0.030	0.059