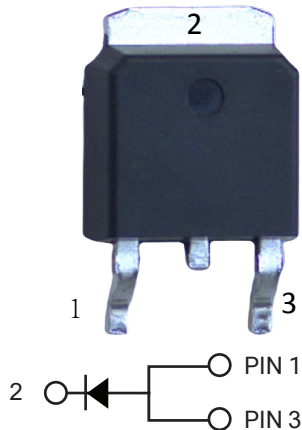


Trench MOS Barrier Schottky Rectifier

TSP20A150D-S

TO-252



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)

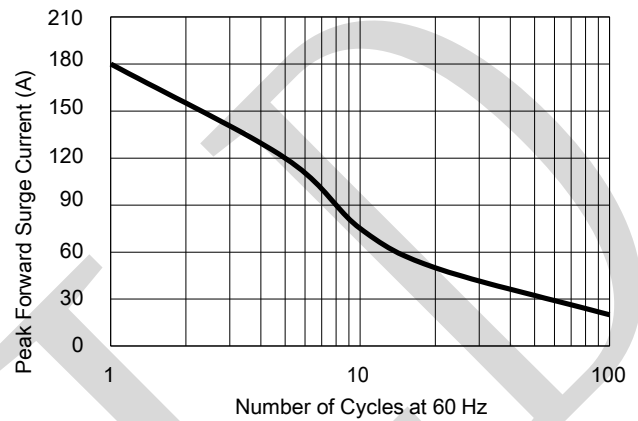
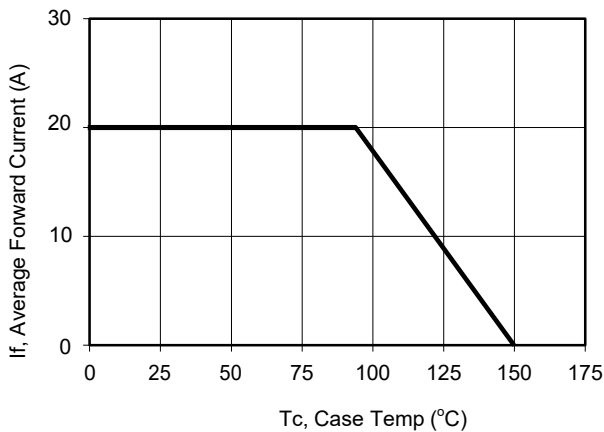
Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	150		V
Maximum average forward rectified current			IF(AV)	20		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode			IFSM	200		A
Operating junction and storage temperature range			TJ, TSTG	-55 to +150		°C
Typical thermal resistance per leg			RθJC	2		°C/W
Instantaneous forward voltage per diode			VF(1)	TYP.	MAX.	V
	IF=2A	TJ=25°C		0.50	0.58	
	IF=2A	TJ=125°C		0.44	-	
	IF=10A	TJ=25°C		0.81	0.88	
	IF=10A	TJ=125°C		0.76	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	-	50	uA
		TJ=125°C		-	10	mA

Notes:

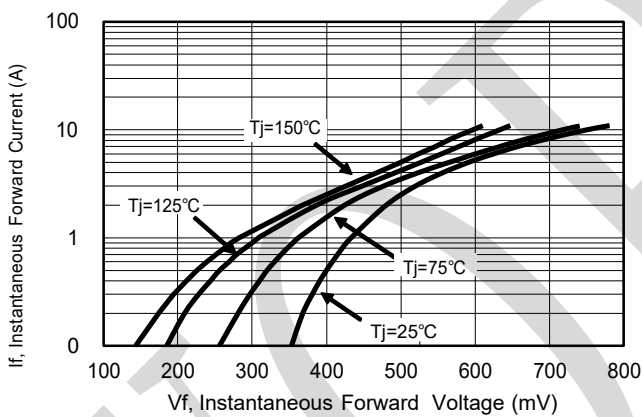
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

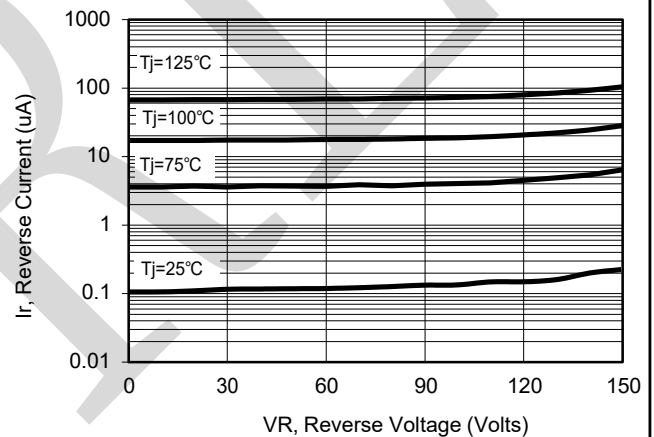
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



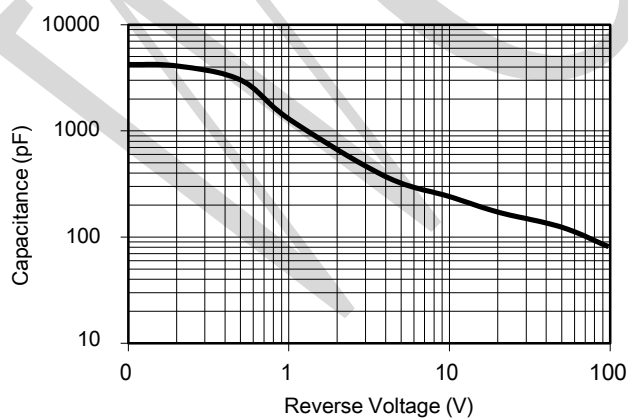
Current Derating, Case



Maximum Repetitive Surge Current



Typical Forward Voltage



Typical Reverse Current

Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS

TO-252

