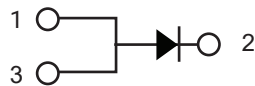
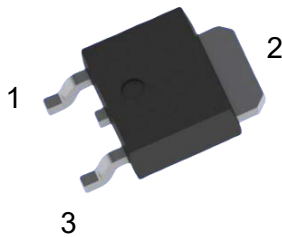


Trench MOS Barrier Schottky Rectifier

TSP10L300D-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)

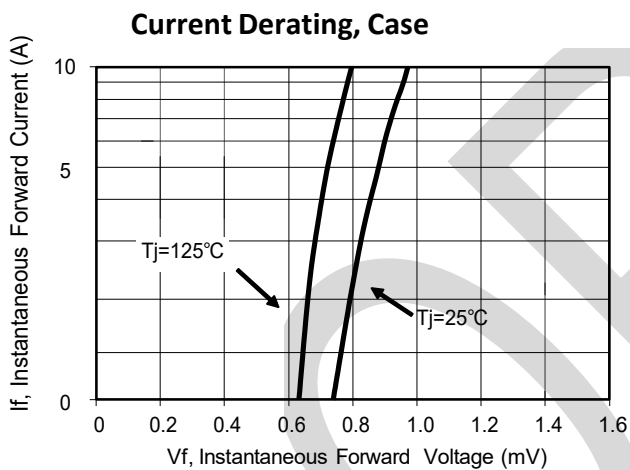
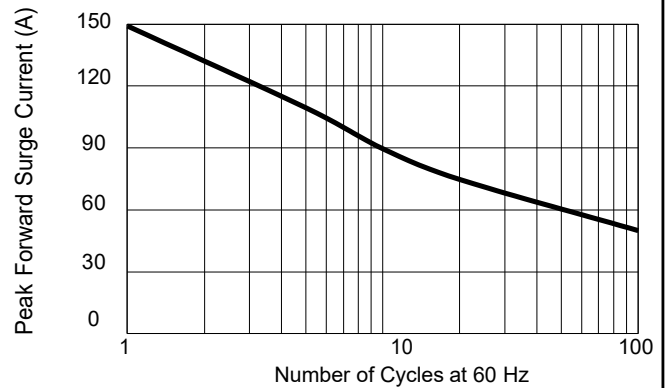
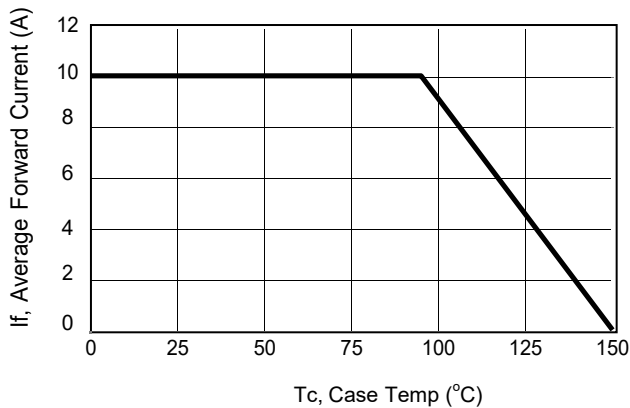
Parameter		Symbol	Limit		Unit
Maximum repetitive peak reverse voltage		VRRM	300		V
Maximum average forward rectified current		IF(AV)	10		A
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode		IFSM	150		A
Operating junction and storage temperature range		T _J , T _{STG}	-55 to +150		°C
Typical thermal resistance per leg	TO-252	R _{θJC}	6		°C/W
Instantaneous forward voltage per diode			TYP.	MAX.	V
	IF=1A	T _J =25°C	0.71	0.76	
	IF=1A	T _J =125°C	0.66	-	
	IF=5A	T _J =25°C	0.85	0.90	
	IF=5A	T _J =125°C	0.80	-	
Instantaneous reverse current per diode at rated reverse voltage	T _J =25°C		-	5	uA
	T _J =125°C		-	200	mA

Notes:

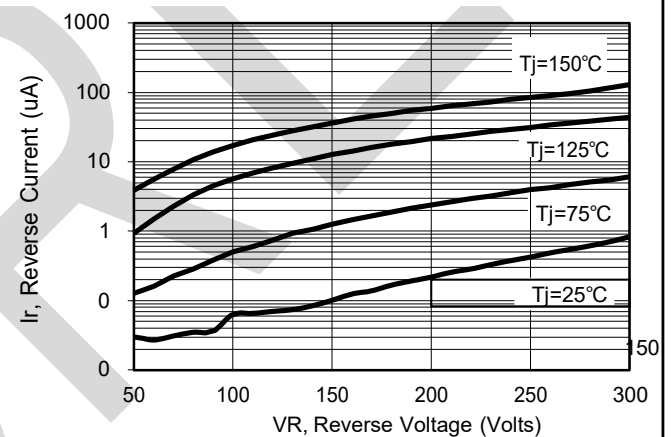
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

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



Maximum Repetitive Surge Current



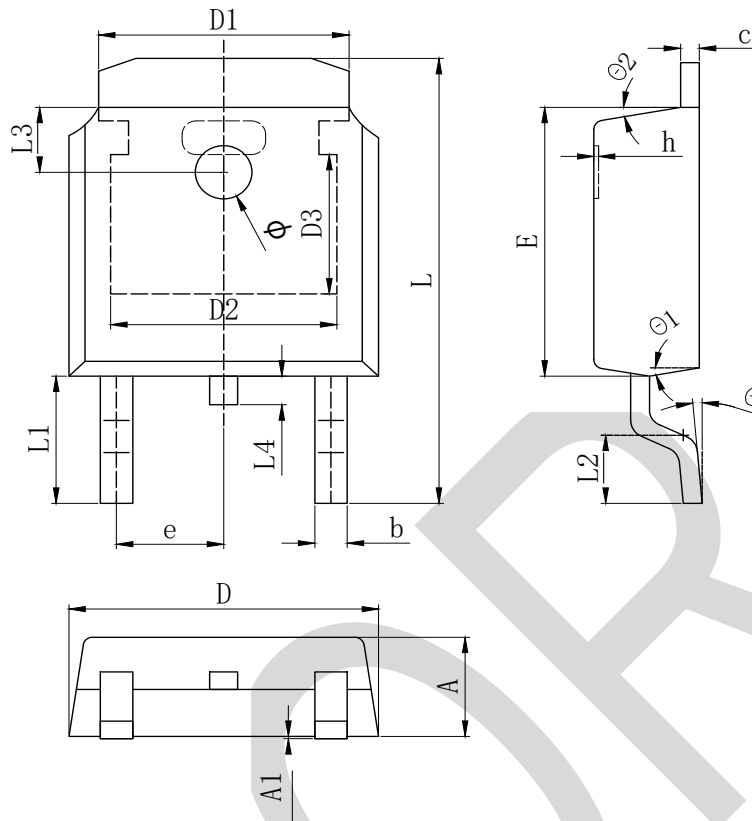
Typical Forward Voltage

Typical Reverse Current

PACKAGE OUTLINE DIMENSIONS

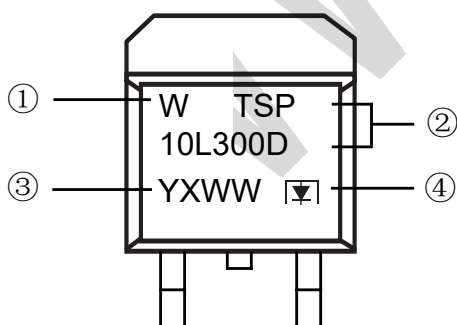
Note:unit In(mm)

TO-252



SYMBOL	MILLIMETER		
	MIN	Typ.	MAX
A	2.200	2.300	2.400
A1	0.000		0.127
b	0.640	0.690	0.740
c	0.700	0.800	0.900
D	6.500	6.600	6.700
D1	5.334 REF		
D2	4.826 REF		
D3	3.166 REF		
E	6.000	6.100	6.200
e	2.286 TYP		
h	0.000	0.100	0.200
L	9.900	10.100	10.300
L1	2.888 REF		
L2	1.400	1.550	1.700
L3	1.600 REF		
L4	0.600	0.800	1.000
Φ	1.100	1.200	1.300
θ	0°		8°
θ1	9° TYP		
θ2	9° TYP		

Marking Information



- ①W : Company's trademark
- ②Product model : TSP10L300D
- ③PDC information :

Y X WW

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)

- ④ Single wafer