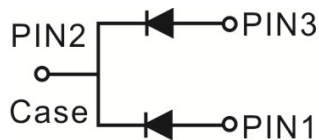
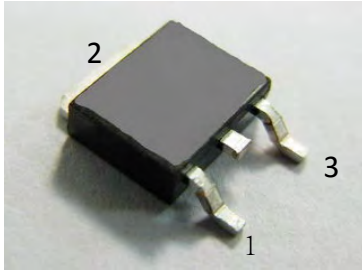


## Trench MOS Barrier Schottky Rectifier

**TSP10L300D**  
**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<sub>J</sub> = 25°C unless otherwise noted)

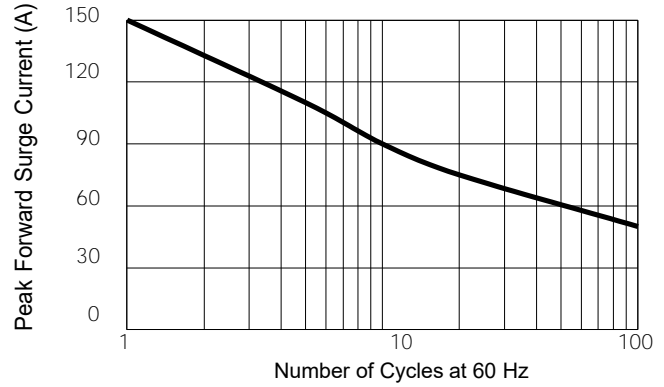
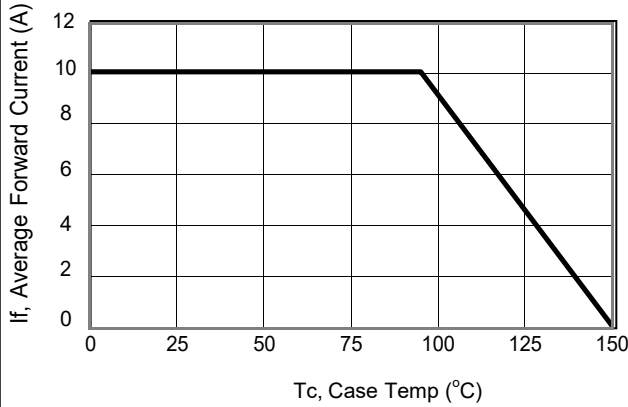
Parameter		Symbol	Limit		Unit
Maximum repetitive peak reverse voltage		VRRM	300		V
Maximum average forward rectified current	device	IF(AV)	10		A
	per diode		5		
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode		IFSM	150		A
Operating junction and storage temperature range		TJ, TSTG	-50 to +150		°C
Typical thermal resistance per leg	TO-252	RθJC	6		°C/W
Instantaneous forward voltage per diode			TYP.	MAX.	V
	IF=1A	TJ=25°C	0.71	0.76	
	IF=1A	TJ=125°C	0.66	-	
	IF=5A	TJ=25°C	0.85	0.90	
	IF=5A	TJ=125°C	0.80	-	
Instantaneous reverse current per diode at rated reverse voltage	TJ=25°C	IR(2)	1	5	uA
	TJ=125°C		-	200	uA

Notes:

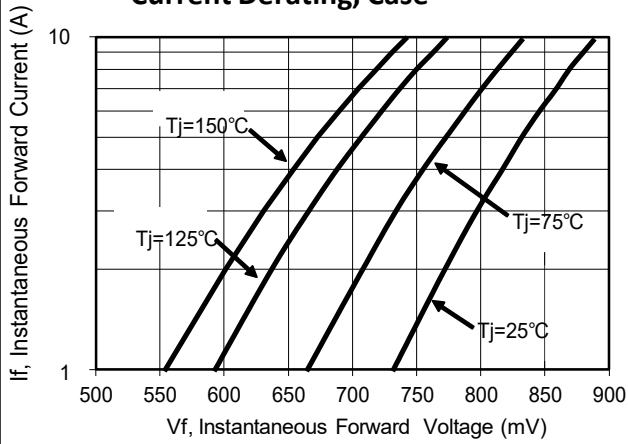
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≦ 40 ms

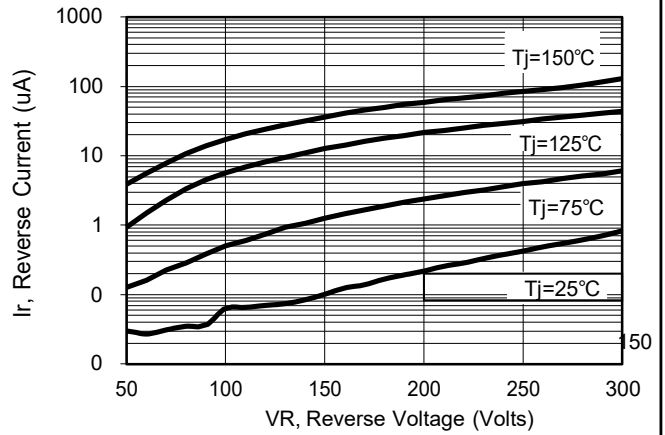
## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



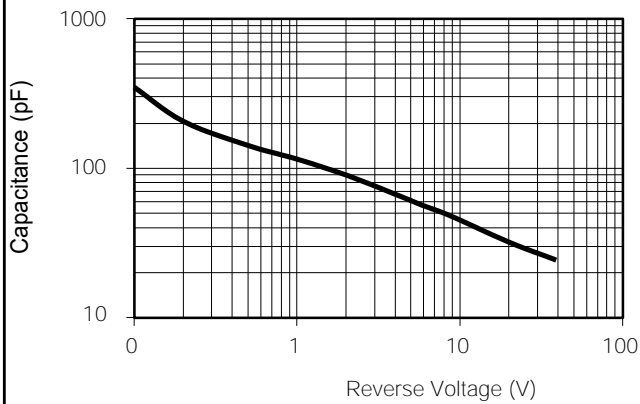
### Current Derating, Case



### Maximum Repetitive Surge Current



### Typical Forward Voltage



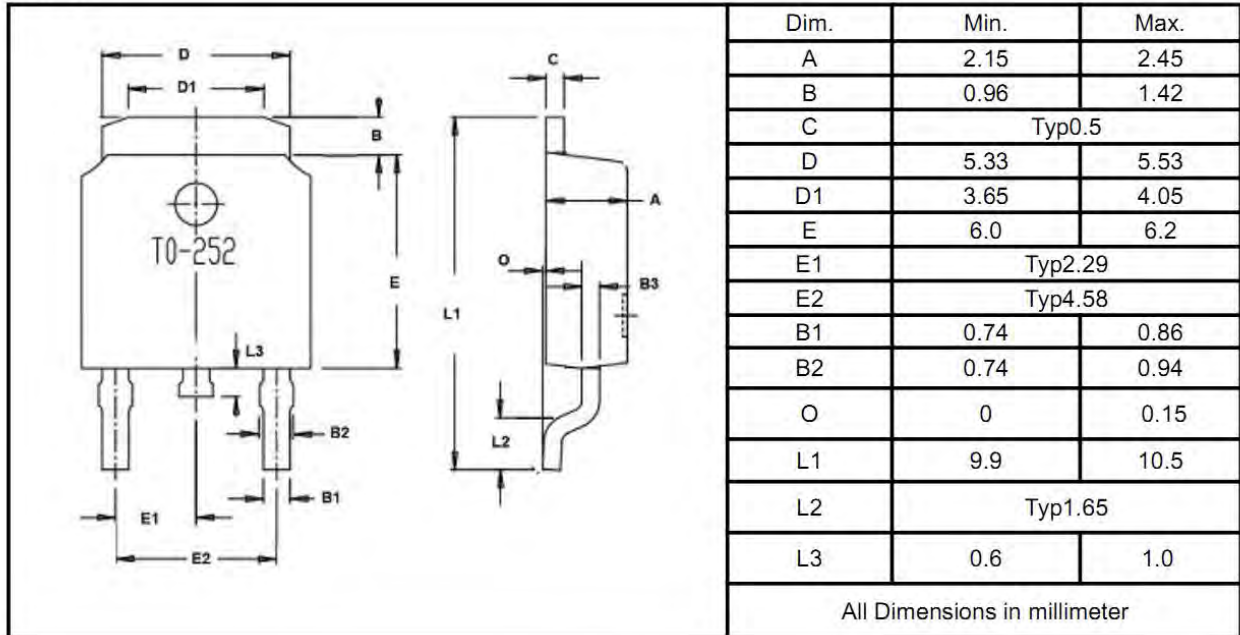
### Typical Reverse Current

### Typical Junction Capacitance

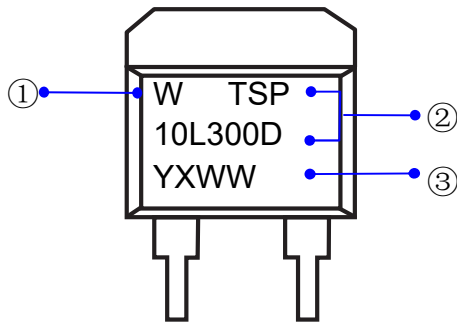
## PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)

### TO-252

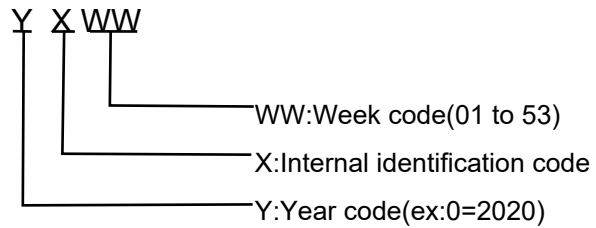


## Marking Information



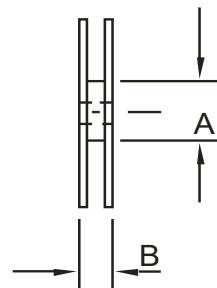
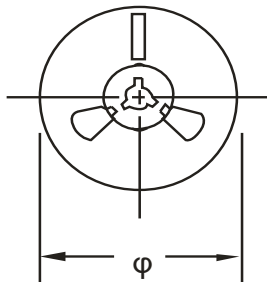
①W : Company's trademark  
②Product model : TSP10L300D

③PDC information :

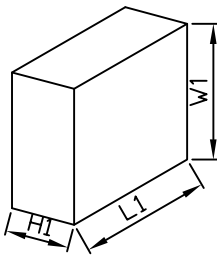


## Packaging Information

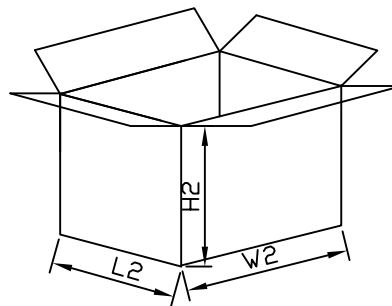
### 1.Reel Dimensions



### 2. Inside Box



### 3.Outside Box



## Packaging Information

NO	UNIT	Reel Dimensions			Inside Box			Outside Box		
		φ	A	B	L1	W1	H1	L2	W2	H2
Size	mm	330	100	15	340	335	45	370	360	270
QTY	PCS	Smallest package,2500PCS/reel			5,000PCS,2 reel in total			25,000PCS/carton,5 boxes in total		
Note		Tolerance ≤20mm,±3mm;			21-100mm,±5mm;			101-500mm,±10mm		