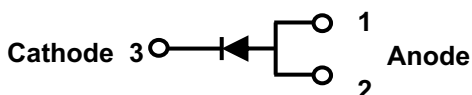


## Trench MOS Barrier Schottky Rectifier

### TSP12L100SP

TO-277



### 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	100		V	
Maximum average forward rectified current		IF(AV)	12		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 diode(Mounted on FR-4 PCB)		R <sub>JC</sub>	72		°C/W	
Instantaneous forward voltage per diode		VF(1)	TYP.	MAX.	V	
	IF=2A		TJ=25°C	0.4		0.49
	IF=2A		TJ=125°C	0.4		-
	IF=12A		TJ=25°C	0.6		0.7
	IF=12A		TJ=125°C	0.6		-
Instantaneous reverse current per diode at rated reverse voltage	TJ=25°C	IR(2)	20	80	uA	
	TJ=125°C		-	20	mA	

Notes:

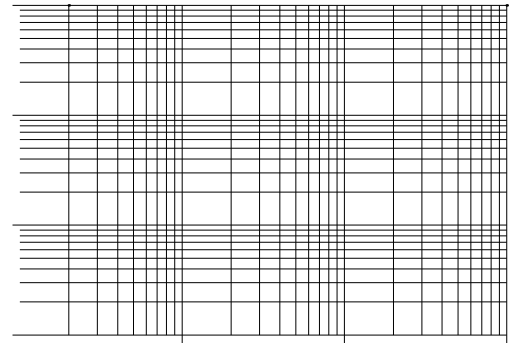
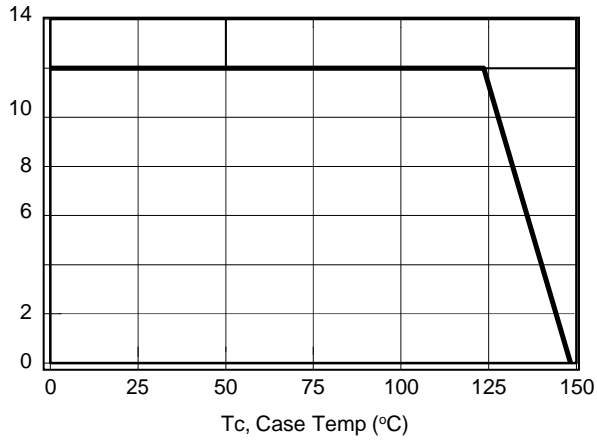
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≦ 40 ms

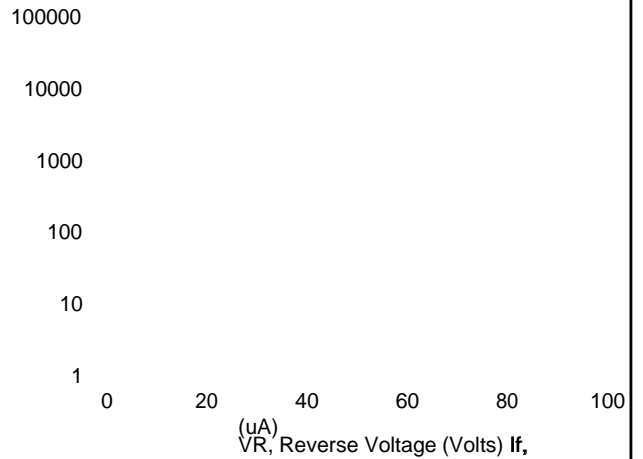
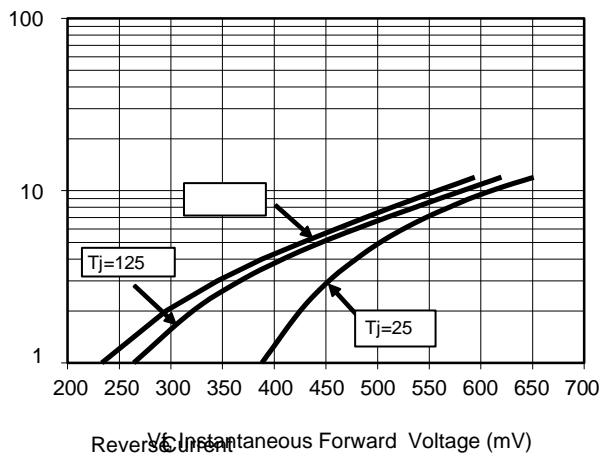
# TSP12L100SP

09-NOV-2014

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



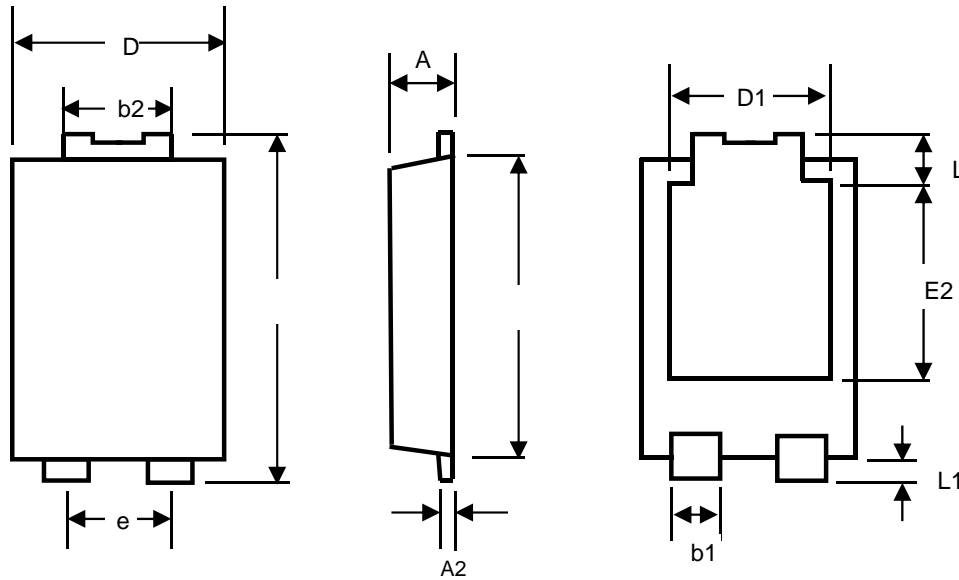
### Typical Junction Capacitance



# TSP12L100SP

09-NOV-2014

## PACKAGE OUTLINE DIMENSIONS



## TO-277 mechanical data

UNIT		A	A2	b1	b2	D	D1	E	E1	E2	L	L1
mm	max	1.3	0.4	1.0	1.9	4.3	3.05	6.6				
	min											
mil	max	51.18	15.75	39.37	74.80	169.3	120.0	259.8				
	min											

# TSP12L100SP

09-NOV-2014

## Marking Information

① Product model :TSP12L100SP Referred to as 12L100

② PDC information

Y X WW

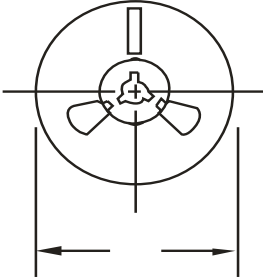
WW:Week code(01 to 53)

X:Internal identification code

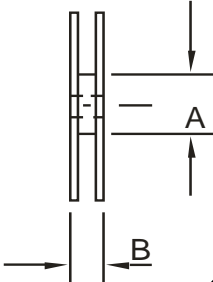
Y:Year code(ex:0=2020)

## Packaging Information

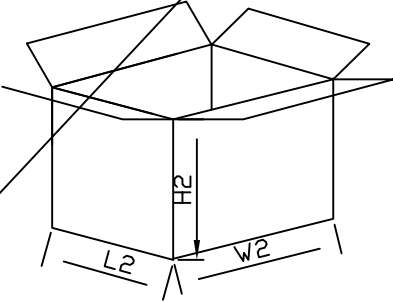
1.Reel Dimensions



2.Inside Box



3.Outside Box



## Packaging Information