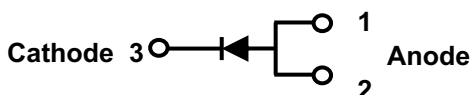


Trench MOS Barrier Schottky Rectifier

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_J = 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 _{JC}	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	IR(2)	TJ=25°C	20	80	uA
		TJ=125°C	-	20	mA

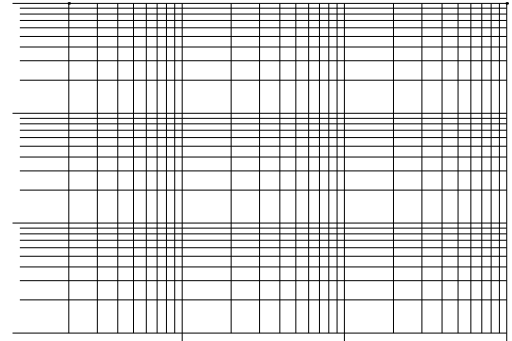
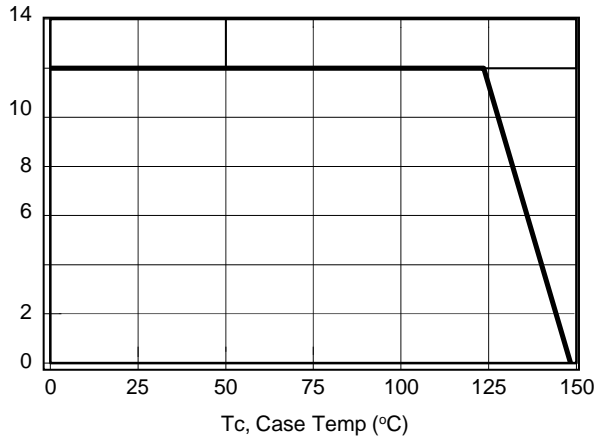
Notes:

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
 (2) Pulse test: Pulse width ≦ 40 ms

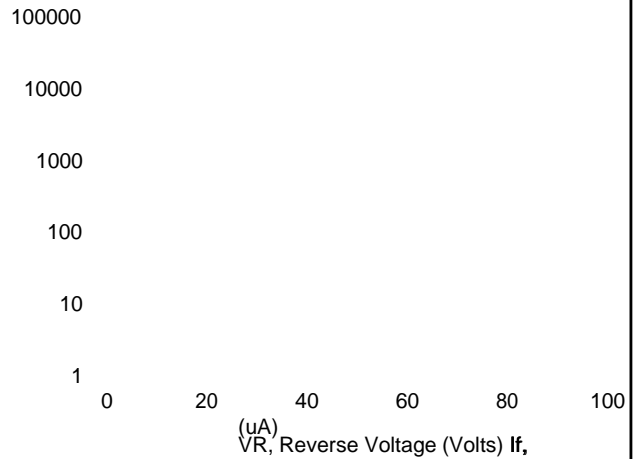
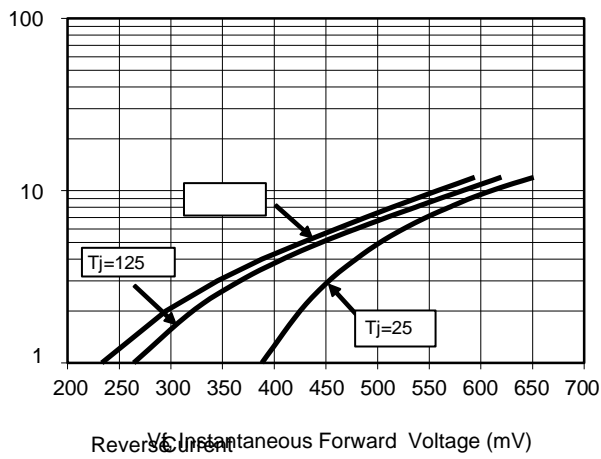
TSP12L100SP

09-NOV-2014

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



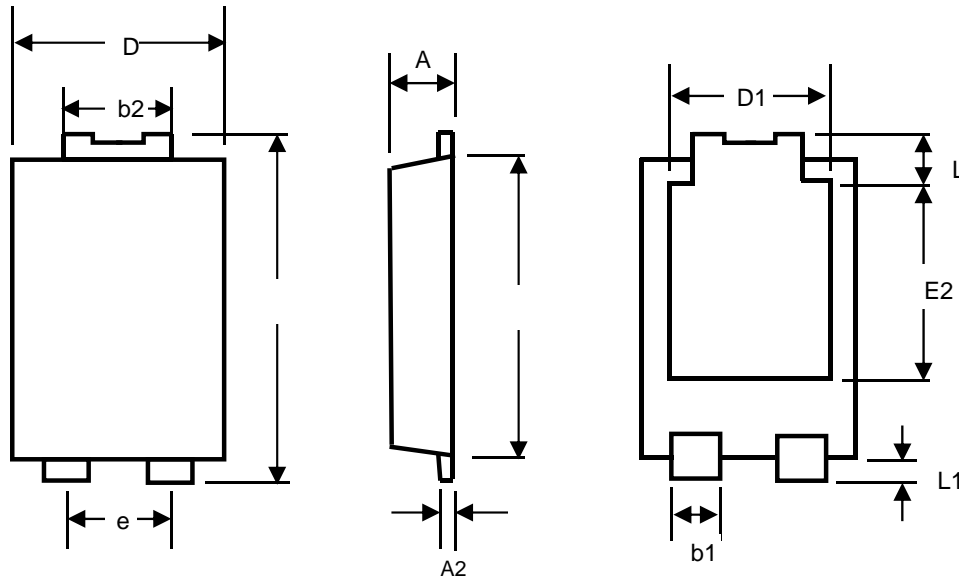
Typical Junction Capacitance



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

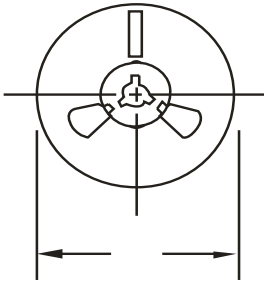
WW:Week code(01 to 53)

X:Internal identification code

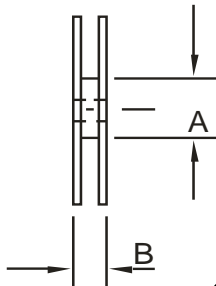
Y:Year code(ex:0=2020)

Packaging Information

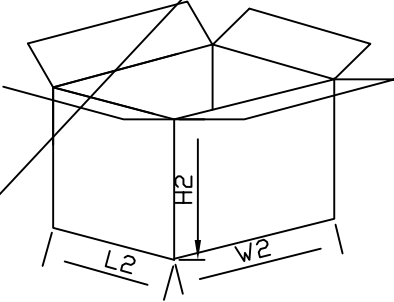
1.Reel Dimensions



2. Inside Box



3. Outside Box



Packaging Information