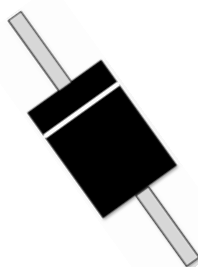


Trench MOS Barrier Schottky Rectifier

TSA3L100E

DO-15



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

Cathode  Anode

Maximum ratings and electrical characteristics (T_J = 25°C unless otherwise noted)

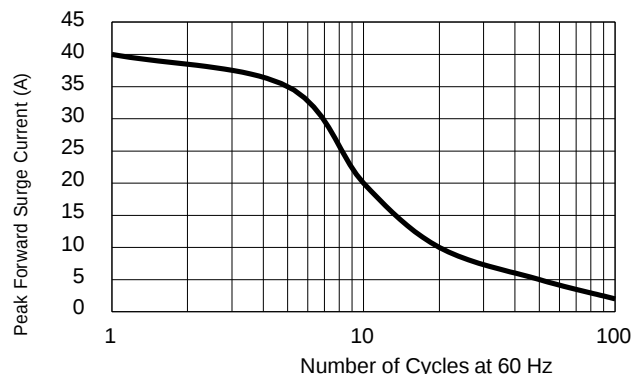
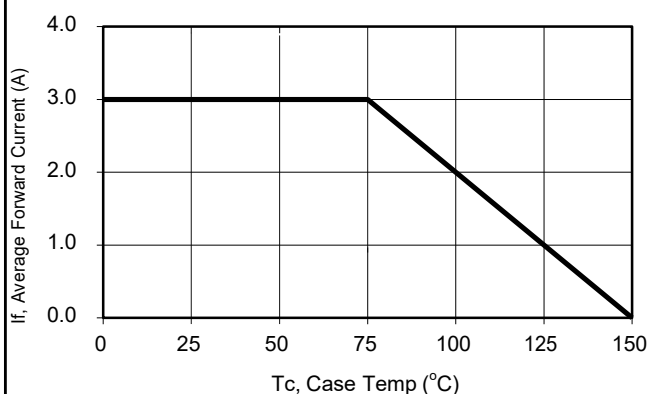
Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			V _{RRM}	100		V
Maximum average forward rectified current			I _{F(AV)}	3		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode			I _{FSM}	50		A
Operating junction and storage temperature range			T _J , T _{STG}	-55 to +150		°C
Typical thermal resistance per diode (Mounted on FR-4 PCB)			R _{θJA}	22		°C/W
Instantaneous forward voltage			V _{F(1)}	TYP.	MAX.	V
	I _F =3A	T _J =25°C		0.75	0.80	
	I _F =3A	T _J =125°C		0.71	-	
Instantaneous reverse current per diode at rated reverse voltage		T _J =25°C	I _{R(2)}	10	-	μA
		T _J =125°C		10	-	mA

Notes:

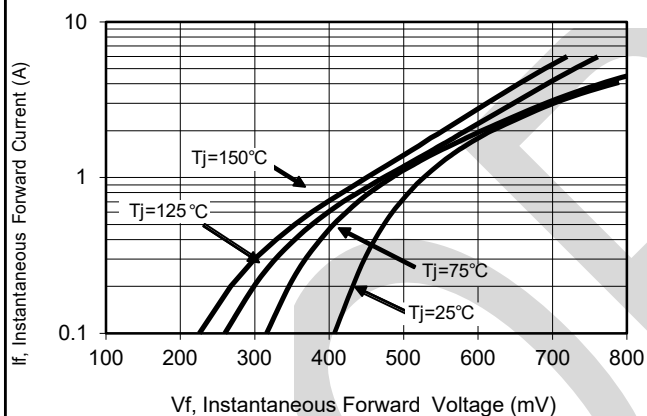
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

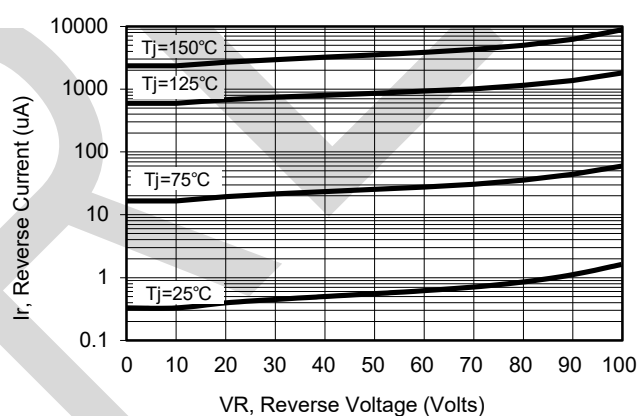
RATINGS AND CHARACTERISTICS CURVES



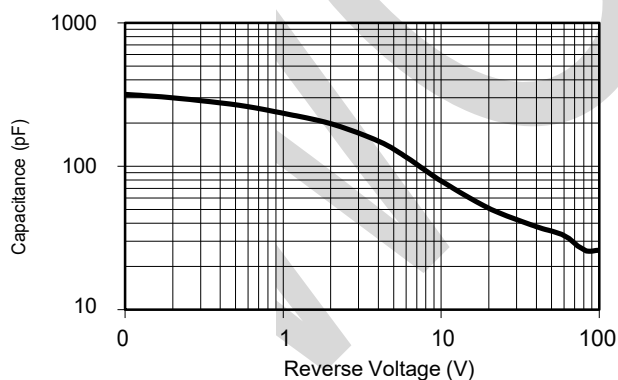
Current Derating, Case



Maximum Repetitive Surge Current

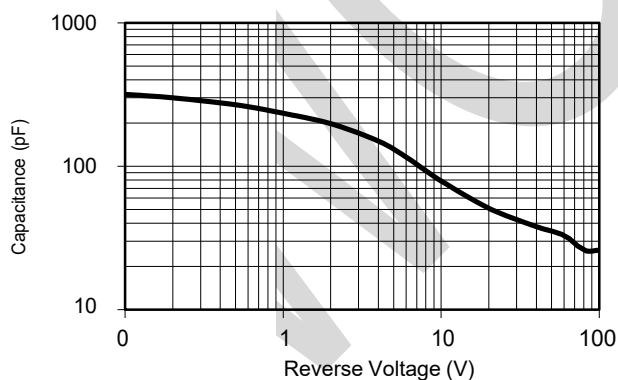


Typical Forward Voltage



Typical Reverse Current

Typical Junction Capacitance



PACKAGE OUTLINE

DO-15 dimensions

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	6.05	6.75	0.238	0.266
B	2.95	3.53	0.116	0.139
C	24.01	29.9	0.945	1.181
D	0.71	0.88	0.028	0.035

Marking Information

Cathode



Anode

① Product model : TSA3L100E

② PDC information :

Y X WW

WW: Week code(01 to 53)

X: Internal identification code

Y: Year code(ex:0=2020)