

Trench MOS Barrier Schottky Rectifier

DO-201AD
TSA5L300



Cathode  Anode

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)

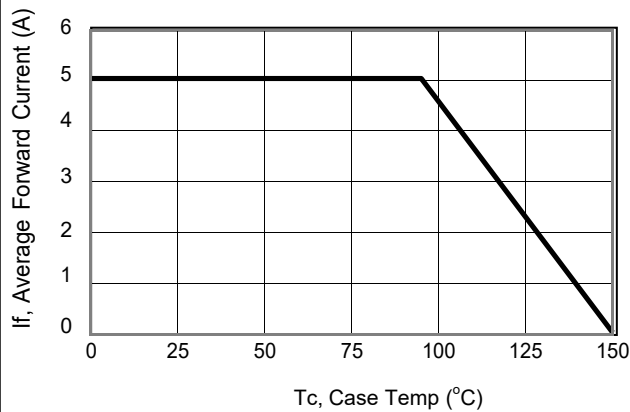
Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	300		V
Maximum average forward rectified current			IF(AV)	5		A
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode			IFSM	150		A
Operating junction and storage temperature range			T _J , T _{STG}	-55 to +150		°C
Typical thermal resistance per leg		DO-201AD	R _{θJC}	22		°C/W
Instantaneous forward voltage per diode			VF(1)	TYP.	MAX.	V
	IF=1A	TJ=25°C		0.74	0.79	
	IF=1A	TJ=125°C		0.69	-	
	IF=5A	TJ=25°C		0.90	0.95	
	IF=5A	TJ=125°C		0.85	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	1	5	uA
		TJ=125°C		-	80	uA

Notes:

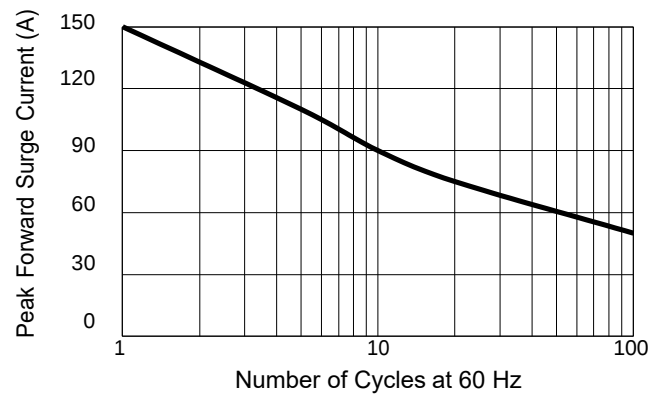
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

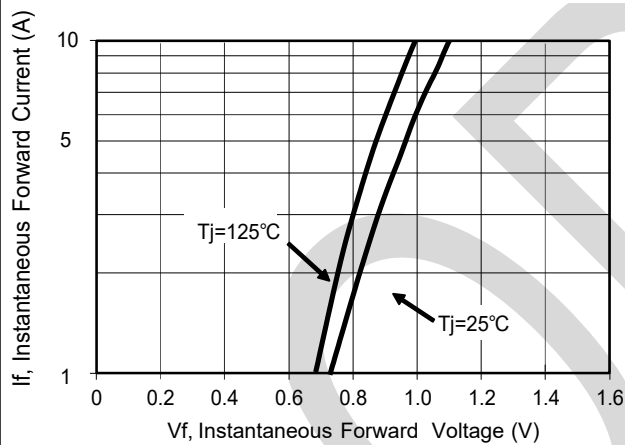
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



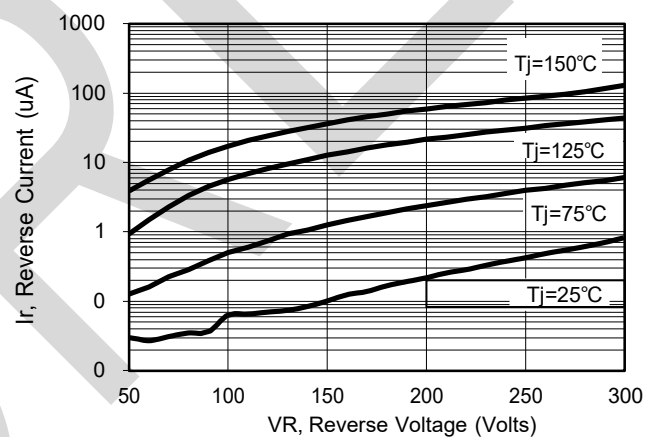
Current Derating, Case



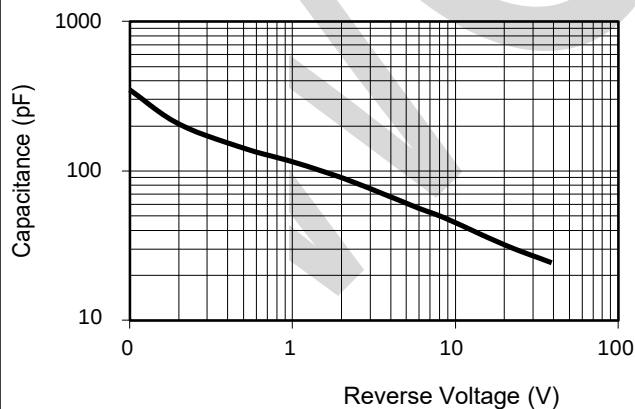
Maximum Repetitive Surge Current



Typical Forward Voltage



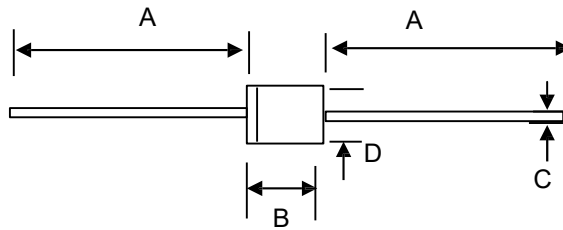
Typical Reverse Current



Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS

DO-201AD



DO-201AD mechanical data

UNIT		A	B	C	D
mm	max	26.5	9.5	1.4	5.3
	min	24.5	7.3	1.1	4.8
mil	max	1043.30	374.01	55.12	208.67
	min	946.57	287.40	39.37	188.97

Marking Information

Cathode



Anode

① Product model : TSA5L300

② PDC information :

Y X WW

WW: Week code(01 to 53)

X: Internal identification code

Y: Year code(ex:0=2020)