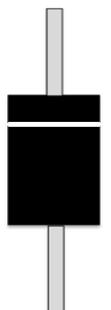


Trench MOS Barrier Schottky Rectifier

DO-201AD

TSA8L300



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 ($T_J = 25^\circ\text{C}$ unless otherwise noted)

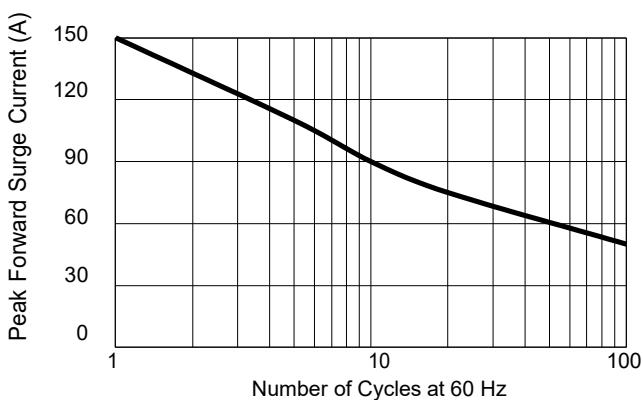
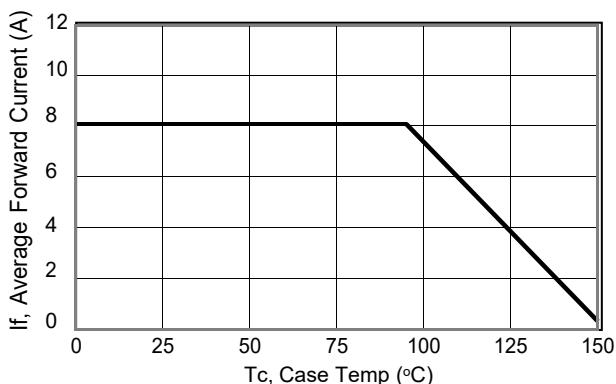
Parameter	Symbol	Limit		Unit
Maximum repetitive peak reverse voltage	VRRM	300		V
Maximum average forward rectified current	IF(AV)	8		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode	IFSM	150		A
Operating junction and storage temperature range	T_J , TSTG	-50 to +150		°C
Typical thermal resistance per leg	DO-201AD	R θ JC		°C/W
Instantaneous forward voltage per diode		TYP.	MAX.	
	IF=2A	TJ=25°C	0.71	0.76
	IF=2A	TJ=125°C	0.66	-
	IF=8A	TJ=25°C	0.84	0.89
	IF=8A	TJ=125°C	0.79	-
Instantaneous reverse current per diode at rated reverse voltage	TJ=25°C	IR(2)	1	5
	TJ=125°C		-	80

Notes:

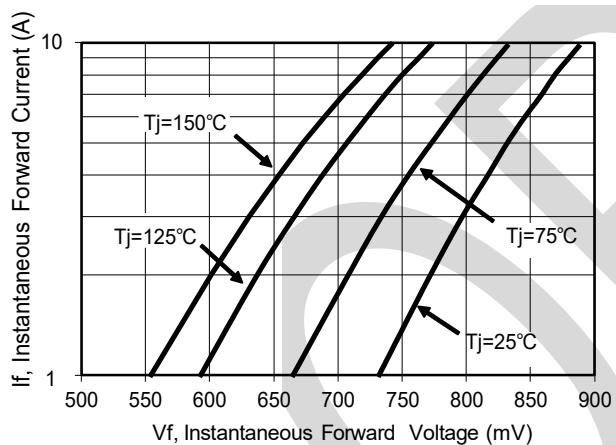
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

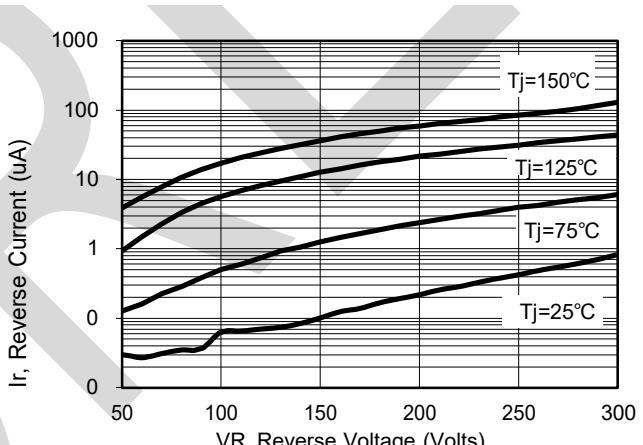
RATINGS AND CHARACTERISTICS CURVES ($TA = 25^\circ\text{C}$ unless otherwise noted)



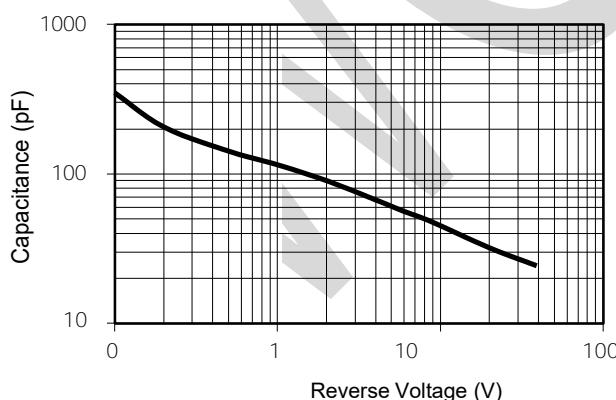
Current Derating, Case



Maximum Repetitive Surge Current



Typical Forward Voltage

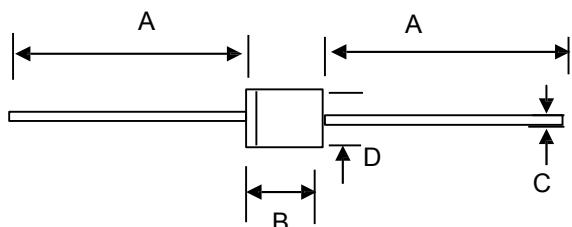


Typical Reverse Current

Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS

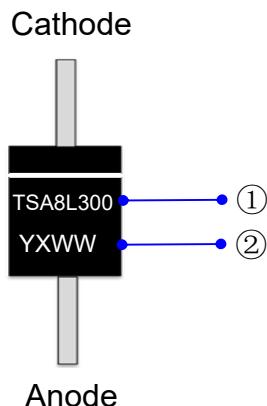
DO-201AD



DO-201AD mechanical data

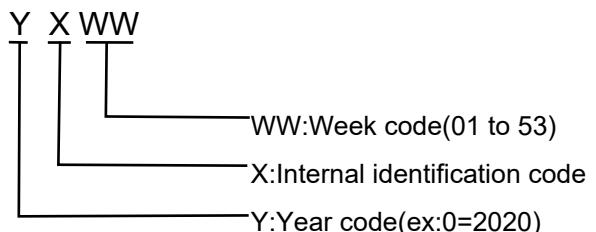
UNIT		A	B	C	D
mm	max	26.5	9.5	1.4	5.3
	min	24.5	7.3	1.1	4.8
mil	max	1043.30	374.01	55.12	208.67
	min	946.57	287.40	39.37	188.97

Marking Information



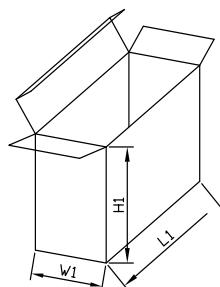
①Product model : TSA8L300

②PDC information:

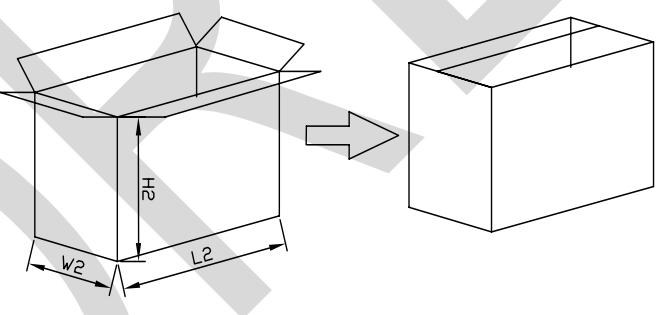


Packaging Information

1.Inside Box



2.Outside Box



Packaging Information

NO	UNIT	Inside Box			Outside Box		
		L1	W1	H1	L2	W2	H2
Size	mm	255	75	145	415	280	320
		Smallest package,1000PCS/carton			10,000PCS/carton,10 boxes in total		
Note	Tolerance	$\leq 20\text{mm}, \pm 3\text{mm};$			$21\text{-}100\text{mm}, \pm 5\text{mm};$		
			$101\text{-}500\text{mm}, \pm 10\text{mm}$				