

## Trench MOS Barrier Schottky Rectifier

**DO-201AD**

**TSA10L100**



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 (TJ = 25°C unless otherwise noted)

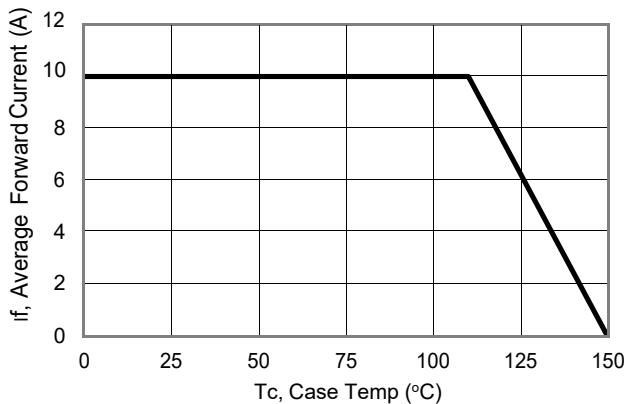
Parameter	Symbol	Limit		Unit
Maximum repetitive peak reverse voltage	VRRM	100		V
Maximum average forward rectified current	IF(AV)	10		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode	IFSM	160		A
Operating junction and storage temperature range	TJ, TSTG	-50 to +150		°C
Typical thermal resistance per leg	R <sub>θJC</sub>	22		°C/W
Instantaneous forward voltage per diode	VF(1)	TYP.	MAX.	
		0.44	0.49	V
		0.39	-	
		0.63	0.70	
		0.58	-	
Instantaneous reverse current per diode at rated reverse voltage	IR(2)	-	60	uA
		-	40	mA

Notes:

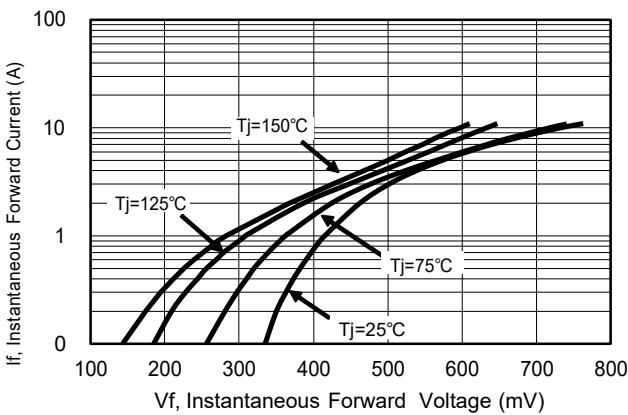
(1) Pulse test: 300 µs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

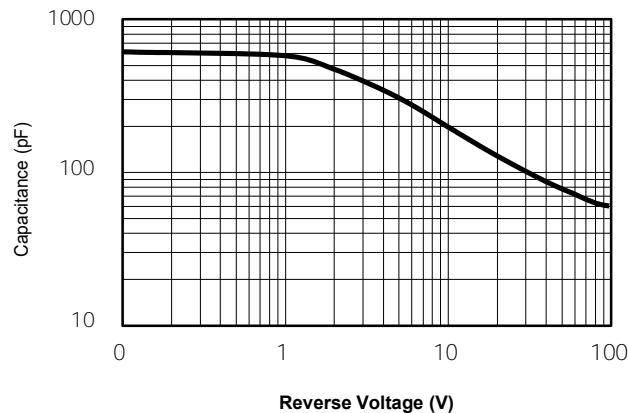
## RATINGS AND CHARACTERISTICS CURVES ( $TA = 25^\circ\text{C}$ unless otherwise noted)



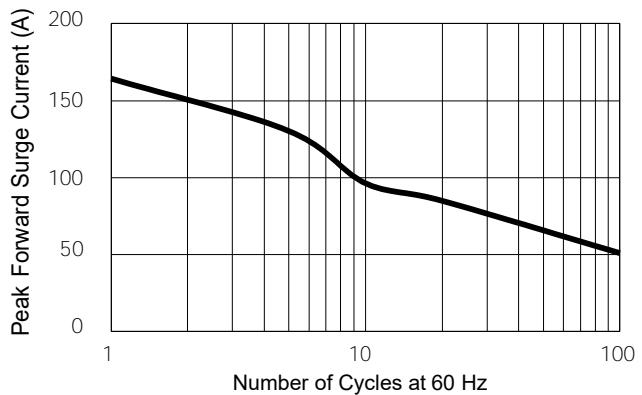
**Current Derating, Case**



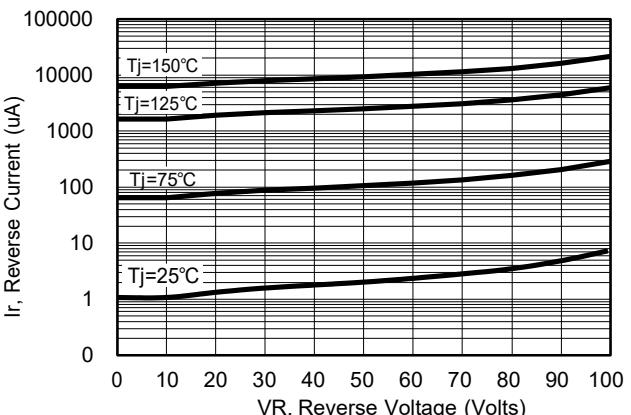
**Typical Forward Voltage**



**Typical Junction Capacitance**



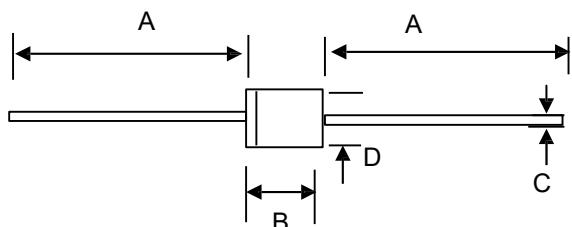
**Maximum Repetitive Surge Current**



**Typical Reverse Current**

## PACKAGE OUTLINE DIMENSIONS

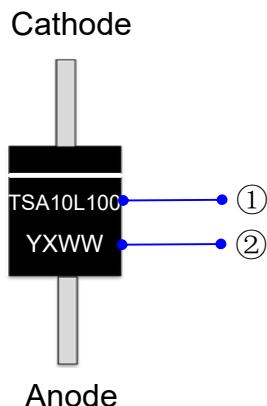
### DO-201AD



DO-201AD mechanical data

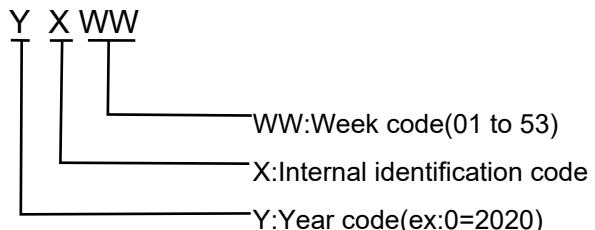
UNIT		A	B	C	D
mm	max	26.5	9.5	1.4	5.3
	min	24.5	7.3	1.1	4.8
mil	max	1043.30	374.01	55.12	208.67
	min	946.57	287.40	39.37	188.97

## Marking Information



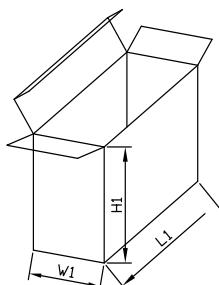
①Product model : TSA10L100

②PDC information:

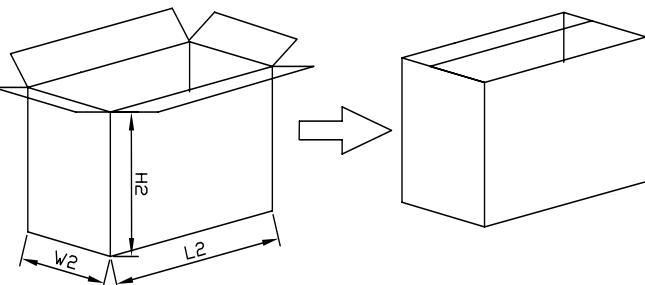


## Packaging Information

1.Inside Box



2.Outside Box



## Packaging Information

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