TSA15L45

26-Jun-2016

Trench MOS Barrier Schottky Rectifier

DO-201AD

TSA15L45

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)

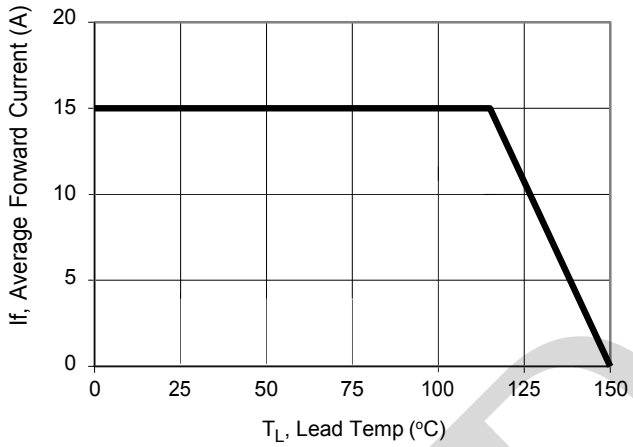
Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	45		V
Maximum average forward rectified current			IF(AV)	15		A
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode			IFSM	200		A
Operating junction and storage temperature range			TJ, TSTG	-50 to +150		°C
Typical thermal resistance per leg		DO-201AD	RΘJC	22		°C/W
Instantaneous forward voltage per diode			VF(1)	TYP.	MAX.	
	IF=3A	TJ=25°C		0.35	0.38	V
	IF=3A	TJ=125°C		0.30	-	
	IF=15A	TJ=25°C		0.48	0.53	
	IF=15A	TJ=125°C		0.43	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	-	200	uA
		TJ=125°C		-	50	mA

Notes:

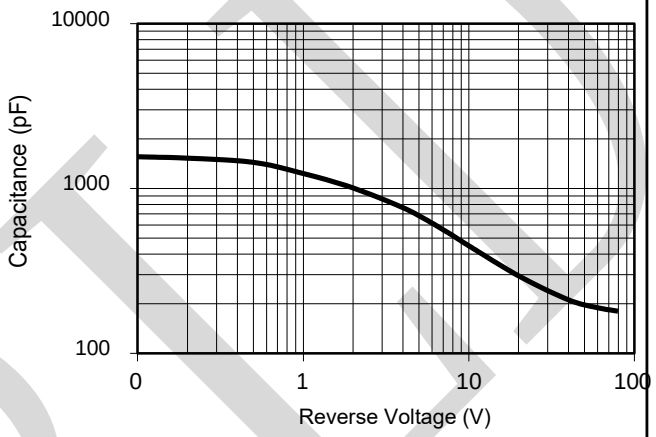
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≦ 40 ms

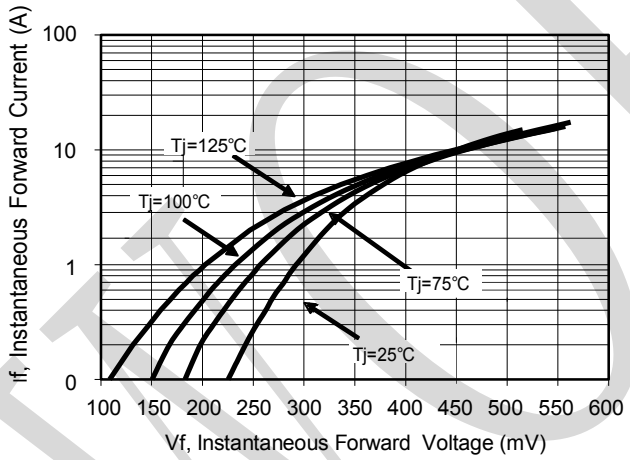
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



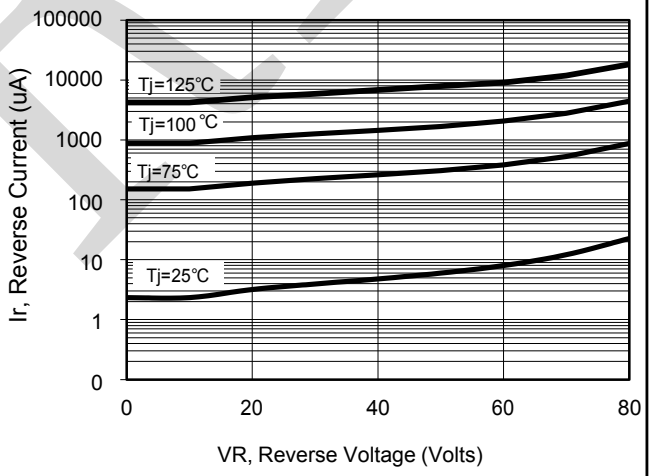
Current Derating, Case



Typical Junction Capacitance



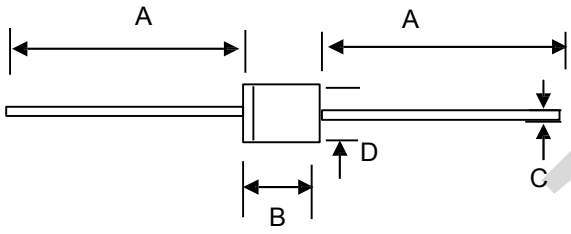
Typical Forward Voltage



Typical Reverse Current

PACKAGE OUTLINE DIMENSIONS

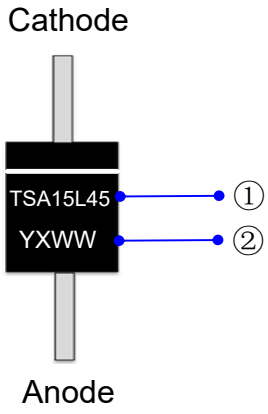
DO-201AD



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 : TSA15L45

②PDC information：

Y X WW

WW:Week code(01 to 53)

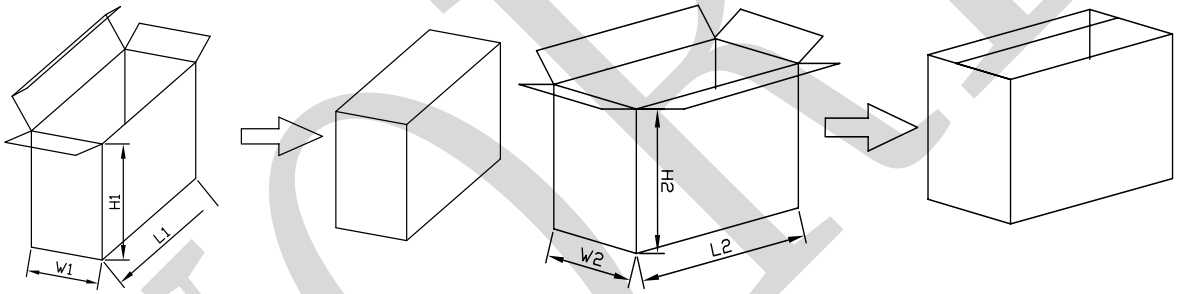
X:Internal identification code

Y:Year code(ex:0=2020)

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 ≤20mm,±3mm; 21-100mm,±5mm; 101-500mm,±10mm						