Trench MOS Barrier Schottky Rectifier

DO-201AD

TSA5S150



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	150		V
Maximum average forward rectified current		Tatol	IF(AV)	5		A
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode			IFSM	120		A
Operating junction and storage temperature range			T_J, T_{STG}	-55 to +150		°C
Typical thermal resistance per leg		DO-201AD	$R_{\Theta JC}$	22		°C/W
Instantaneous forward voltage per diode				TYP.	MAX.	
	IF=1A	TJ=25°C	VF(1)	0.51	0.56	V
	IF=1A	TJ=125°C		0.46	-	
	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	100	uA
		TJ=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 (TA = 25 °C unless otherwise noted)

FIG.1-Current Derating, Case

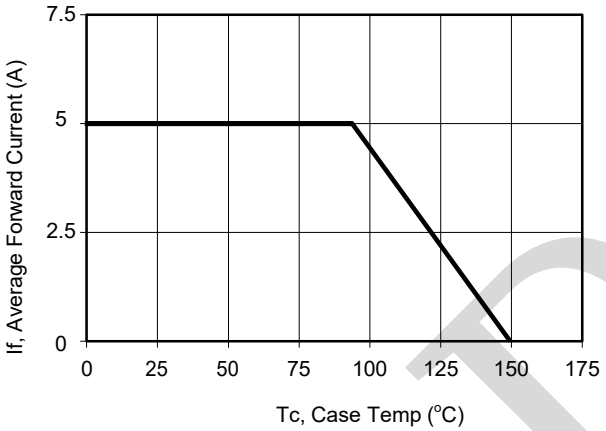


FIG.2-Maximum Repetitive Surge Current

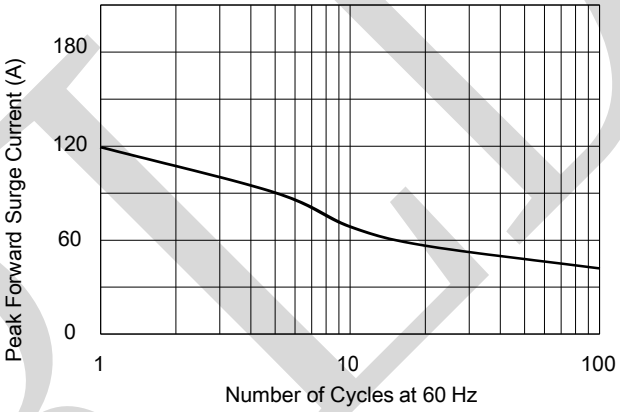


FIG.3-Typical Forward Voltage

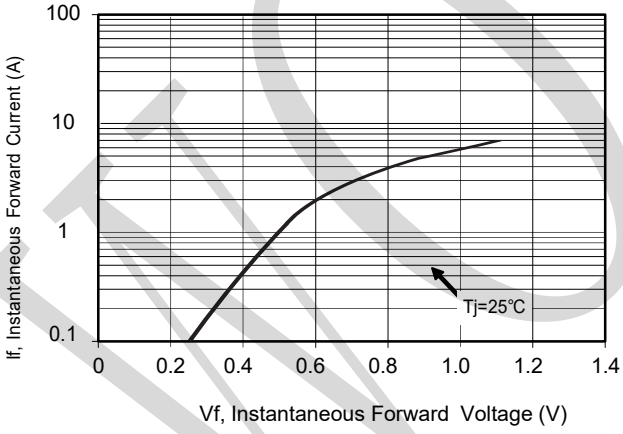
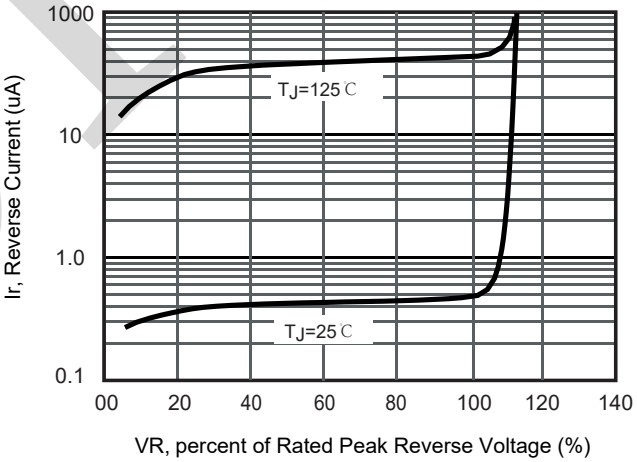


FIG.4-Typical Reverse Current



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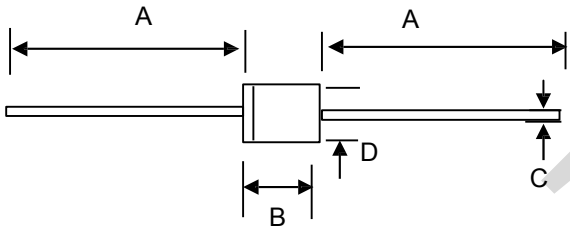
Package Outline Dimensions

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

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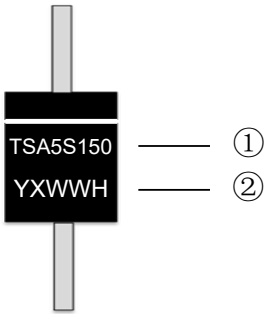
Marking Information



①Product model : TSA5S150

②PDC information：

Y X WW H

H:Halogen-free

WW:Week code(01 to 53)

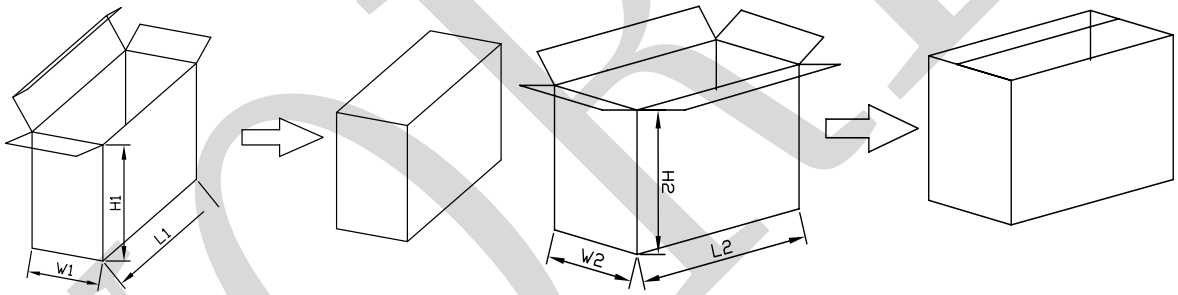
X:Internal identification code

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	1115	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					

Revision Histor			
Date	Revision	Description & changes	Author
2017.08.13	1.0	Initial version	Sun
2020.06.23	1.1	Add printed characters	Sun
2026.07.01	1.2	Version updating	Tang

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