

Trench MOS Barrier Schottky Rectifier

DO-201AD
TSA15P150



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	150		V
Maximum average forward rectified current			IF(AV)	15.0		A
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode			IFSM	220		A
Operating junction and storage temperature range			T _J , T _{STG}	-55 to +175		°C
Typical thermal resistance per diode(Mounted on FR-4 PCB)			R _{θJC}	6		°C/W
Instantaneous forward voltage per diode			VF(1)	TYP.	MAX.	V
	IF=2A	TJ=25°C		0.60	0.62	
	IF=2A	TJ=125°C		0.55	-	
	IF=15A	TJ=25°C		0.80	0.86	
	IF=15A	TJ=125°C		0.70	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	-	1.0	uA
		TJ=125°C		-	5	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

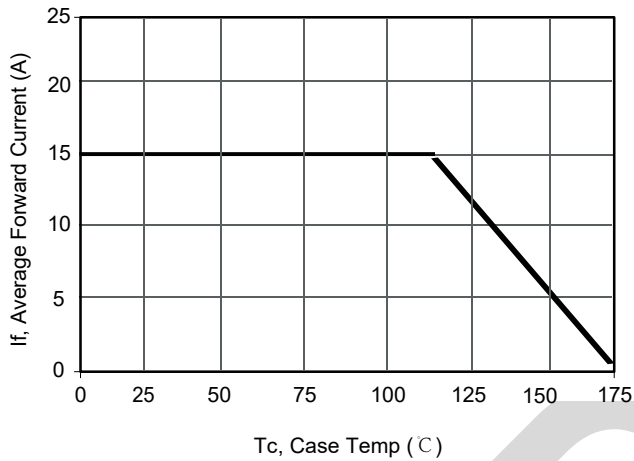


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

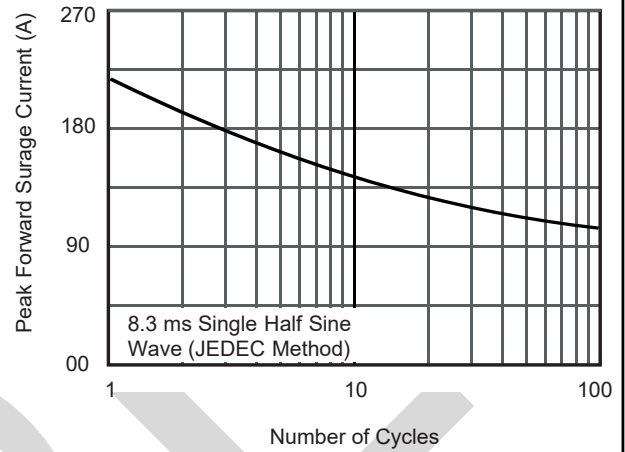


Fig.3 Typical Forward Voltage

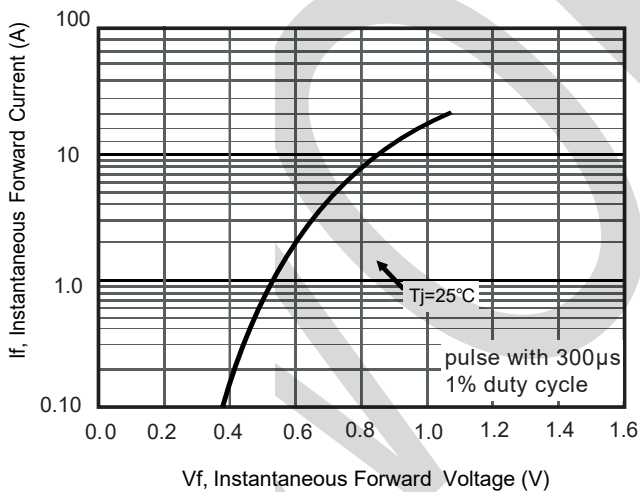
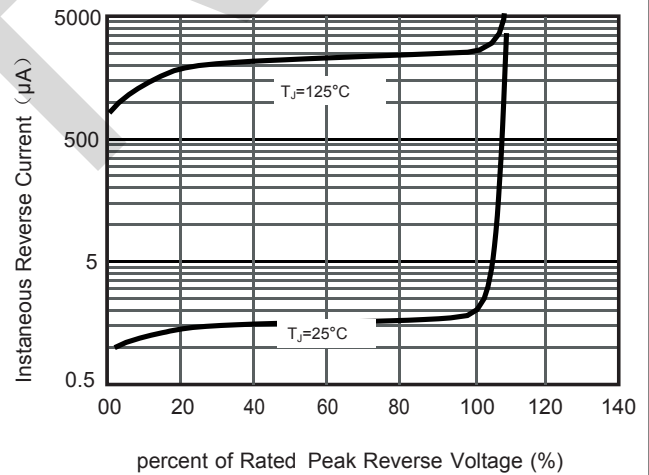
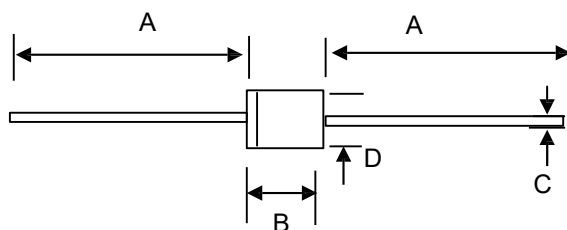


Fig.4 Typical Reverse Characteristics



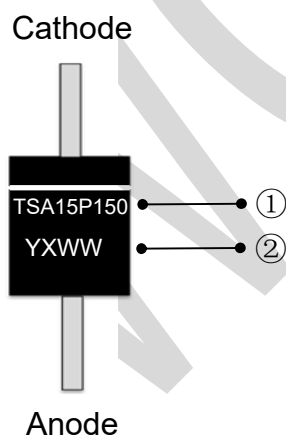
PACKAGE OUTLINE DIMENSIONS



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 : TSA15P150

②PDC information:

Y X WW

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)