

Trench MOS Barrier Schottky Rectifier

DO-201AD
TSA12L100



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)

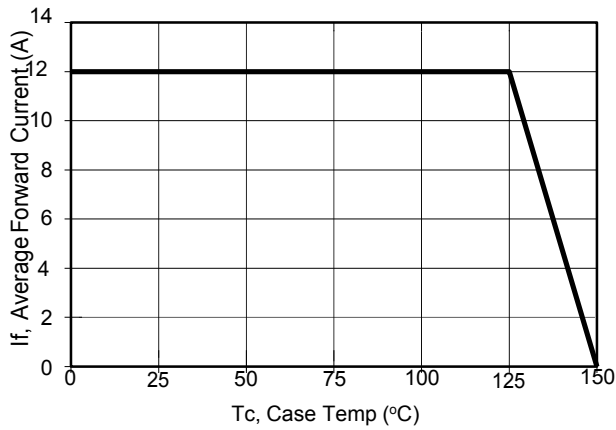
Parameter	Symbol	Limit	Unit		
Maximum repetitive peak reverse voltage	VRRM	100	V		
Maximum average forward rectified current	IF(AV)	12	A		
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode	IFSM	200	A		
Operating junction and storage temperature range	TJ, TSTG	-50 to +150	°C		
Typical thermal resistance per leg	RθJC	22	°C/W		
Instantaneous forward voltage per diode	VF(1)	TYP.	MAX.	V	
		IF=2A TJ=25°C	0.41		0.44
		IF=2A TJ=125°C	0.36		-
		IF=12A TJ=25°C	0.62		0.67
		IF=12A TJ=125°C	0.57		-
Instantaneous reverse current per diode at rated reverse voltage	IR(2)	TJ=25°C	20	80	uA
		TJ=125°C	-	20	mA

Notes:

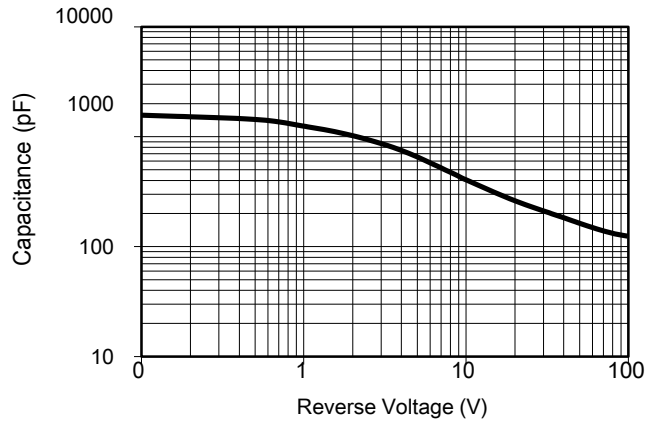
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≦ 40 ms

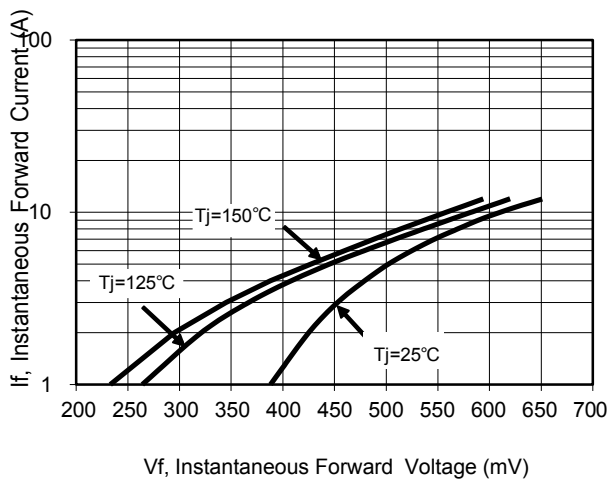
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



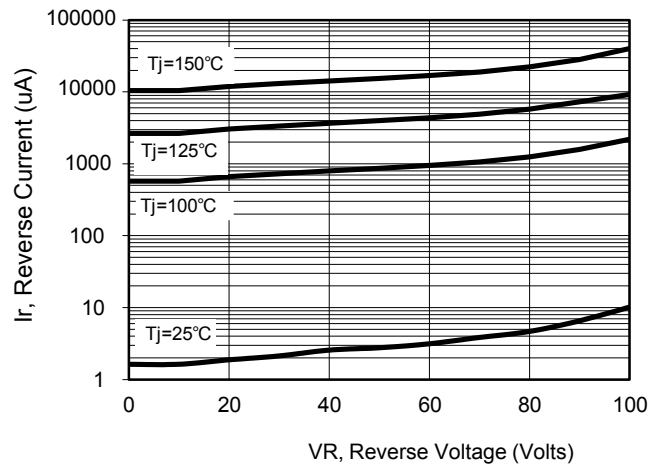
Current Derating, Case



Typical Junction Capacitance



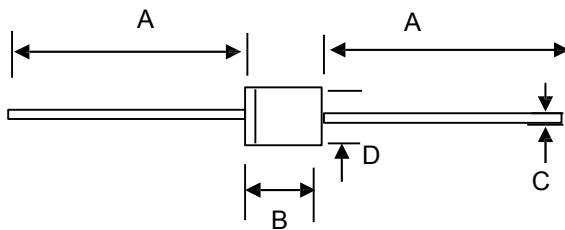
Typical Forward Voltage



Typical Reverse Current

PACKAGE OUTLINE DIMENSIONS

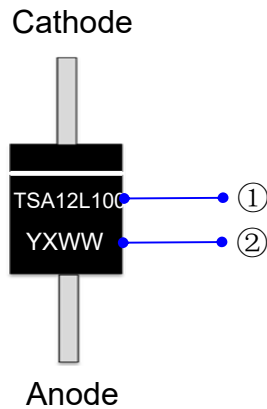
DO-201AD



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



① Product model : TSA12L100

② PDC information :

③ Y X WW

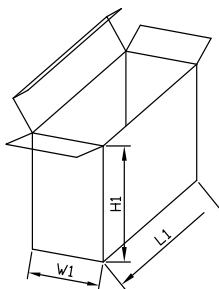
WW: Week code (01 to 53)

X: Internal identification code

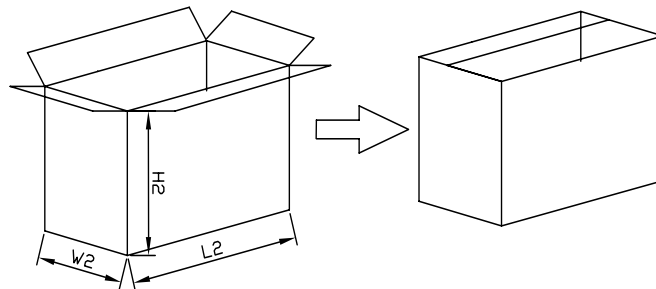
Y: Year code (ex: 0=2020)

Packaging Information

1. Inside Box



2. Outside Box



Packaging Information

NO	UNIT	Inside Box			Outside Box		
		L1	W1	H1	L2	W2	H2
Size	mm	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		