

# 10L45 DO-201AD

## Trench MOS Barrier Schottky Rectifier

DO-201AD

10L45



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

### Maximum ratings and electrical characteristics (T<sub>J</sub> = 25°C unless otherwise noted)

Parameter		Symbol	Limit		Unit
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	45		V
Maximum average forward rectified current		I <sub>F(AV)</sub>	10		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode		I <sub>FSM</sub>	150		A
Operating junction and storage temperature range		T <sub>J</sub> , T <sub>STG</sub>	-65 to +150		°C
Typical thermal resistance per diode (Mounted on FR-4 PCB)		R <sub>θJC</sub>	22		°C/W
Instantaneous forward voltage	I <sub>F</sub> =2A	V <sub>F(1)</sub>	TYP.	MAX.	V
	I <sub>F</sub> =2A		0.41	-	
	I <sub>F</sub> =10A		0.23	-	
	I <sub>F</sub> =10A		0.53	-	
Instantaneous reverse current per diode at rated reverse voltage	T <sub>J</sub> =25°C	I <sub>R(2)</sub>	-	0.2	mA
	T <sub>J</sub> =125°C		-	15	mA

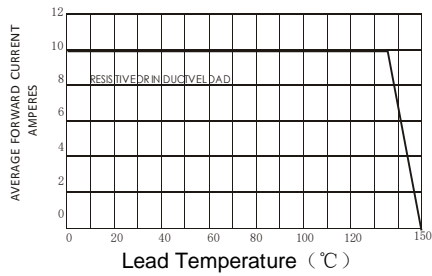
Notes:

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

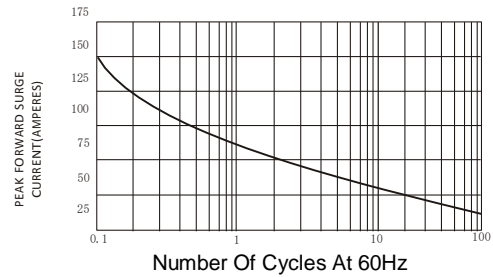
(2) Pulse test: Pulse width ≦ 40 ms

## RATINGS AND CHARACTERISTICS CURVES

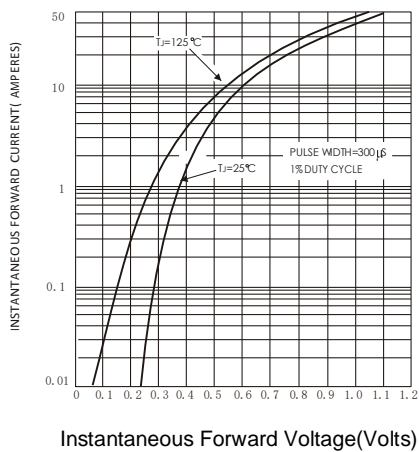
**Forward Current Derating Curve**



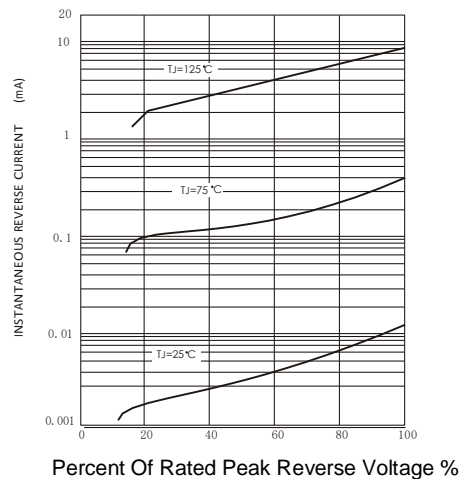
**Maximum Non-repetitive Peak Forward Surge Current**



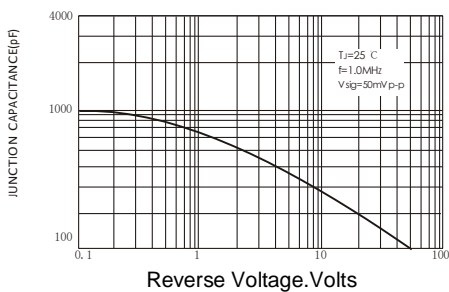
**Typical Instantaneous Forward Characteristics**



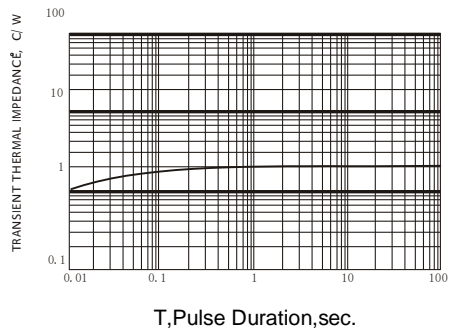
**Typical Reverse Characteristics**



**Typical Junction Capacitance**



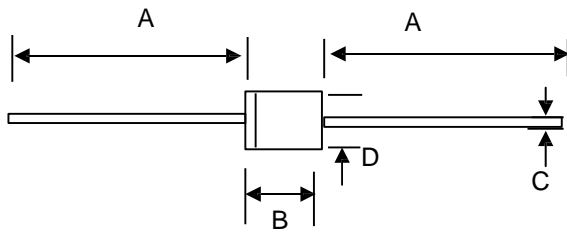
**Typical Transient Thermal Impedance**



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## PACKAGE OUTLINE

### DO-201AD



DO-201AD		
Dim.	Min.	Max.
A	25.4	-
B	7.3	9.5
C	1.2	1.3
D	4.8	5.3
All Dimensions in mm		