

5A High Voltage Schottky Barrier Rectifiers

Features

- Epitaxial Construction
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 150A Peak
- For Use in Low Voltage, High Frequency Inverters ,Free Wheeling , and Polarity Protection Applications .
- RoHS Compliant



DO-201AD



Mechanical Data

Case:	DO-201AD, Molded Plastic
Terminals:	Axial leads, solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes cathode
Mounting Position	Any
Weight:	1.122 grams

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TSR5100 - TSR5200

Maximum Ratings and Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	TSR5100	TSR5150	TSR5200	Unit	Conditions
VRRM	Max. Recurrent Peak Reverse Voltage	100	150	200	V	
VRMS	Max. RMS Voltage	70	105	140	V	
VDC	Max. DC Blocking Voltage	100	150	200	V	
I_{AV}	Max. Average Forward Rectified Current	5.0			A	Fig.1
I_{FSM}	Peak Forward Surge Current	150			A	8.3ms single half sine-wave superimposed on rated load
V_F	Maximum Instantaneous Forward Voltage	0.85	0.90		V	I _F =5.0 A (Note 3)
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	0.05			mA	T _A =25° C
		10				T _A =100° C
R_{thJA}	Typical Thermal Resistance	50			°C / W	Note 2
R_{thJL}		15				Note 1
R_{thJC}		12				Note 1
T_J, T_{STG}	Operating Junction and Storage Temperature Range	-65 to +150			°C	

Note:

1. Measured at ambient temperature at a distance of 9.5mm from the case
2. Minimum Pad Area
3. Pulse test : 300µs pulse width, 1% duty cycle

Typical Characteristics Curves

Fig.1- Typical Forward Current Derating Curve

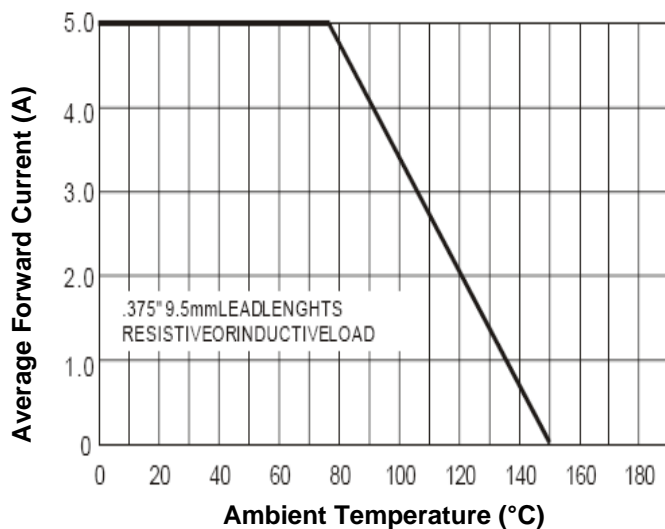
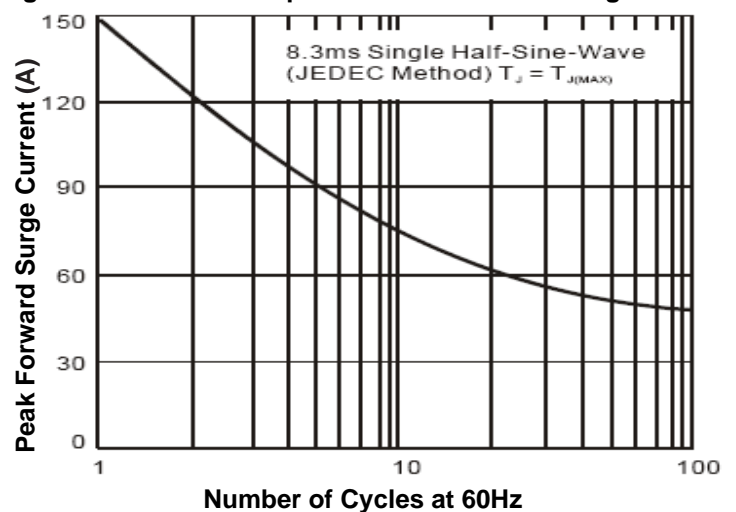


Fig.2- Maximum Non-repetitive Peak Forward Surge Current



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Fig.3- Typical Reverse Current

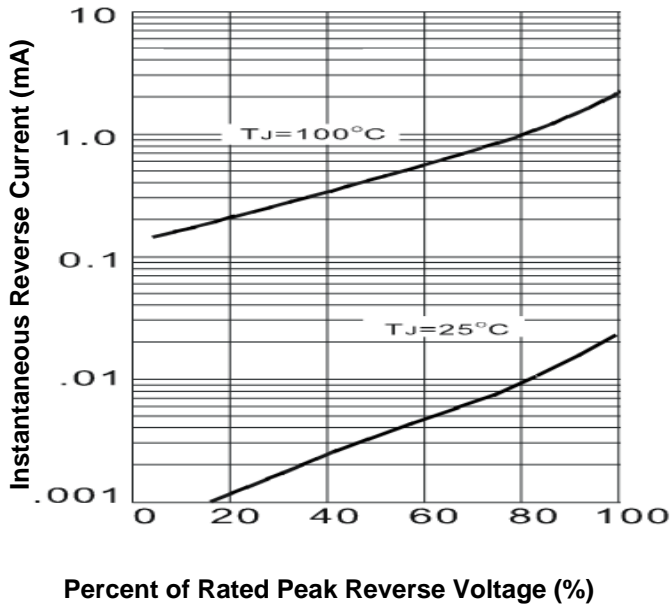


Fig.4- Typical Instantaneous Forward Characteristics

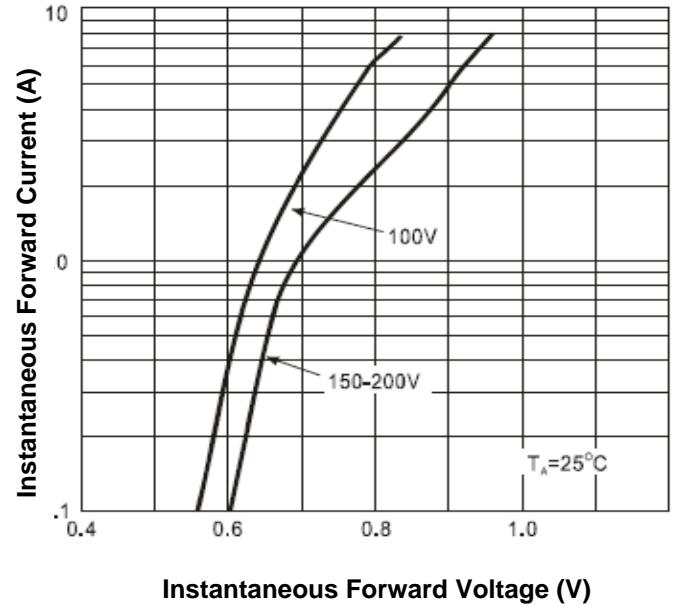
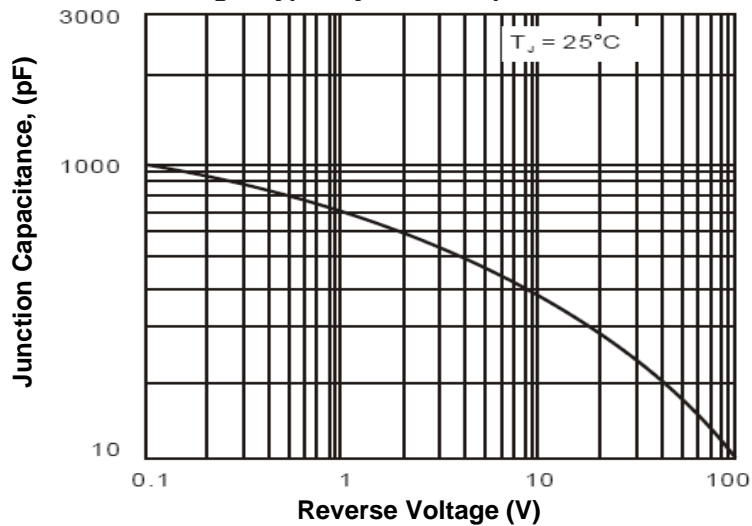


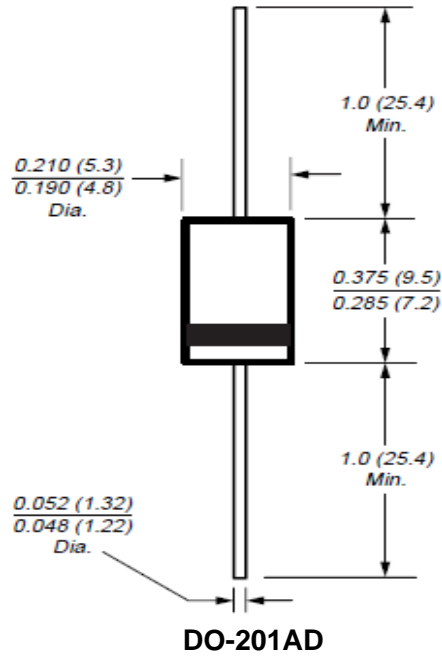
Fig.5- Typical junction capacitance



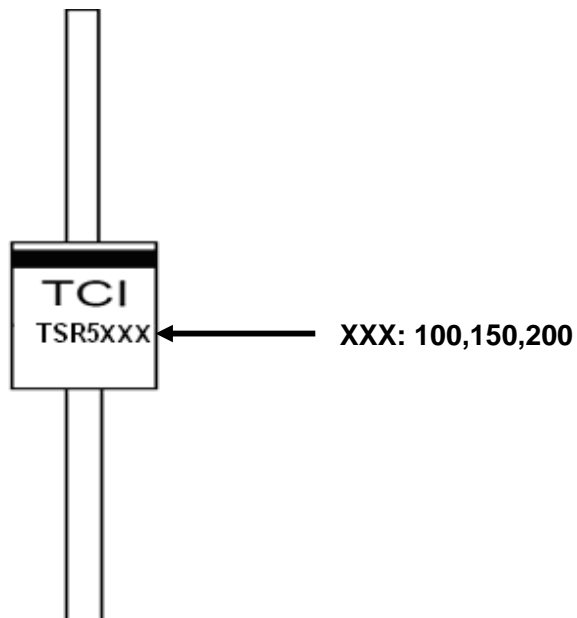
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Dimensions in inches (mm)



Marking Code



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