

5A Schottky Barrier Rectifiers

Features

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- RoHS Compliant



DO-201AD



Mechanical Data

Case:	DO-201AD, Molded Plastic
Epoxy:	UL 94V-0 rate flame retardant
Terminals:	Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
Polarity:	Color band denotes cathode end
Weight:	1.2 grams

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

Symbol	Description	TSR 520	TSR 530	TSR 540	TSR 550	TSR 560	TSR 580	TSR 5100	Unit	Conditions
V_{RRM}	Max. Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V	
V_{RMS}	Max. RMS Voltage	14	21	28	35	42	56	70	V	
V_{DC}	Max. DC Blocking Voltage	20	30	40	50	60	80	100	V	
I_{AV}	Max. Average Forward Rectified Current (FIG.1)	5.0							A	
I_{FSM}	Peak Forward Surge Current	150							A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
V_F	Maximum Instantaneous Forward Voltage	0.55			0.70		0.85		V	I _F =5.0 A
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	0.5							mA	TA=25° C
		50								TA=125° C

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TSR520 - TSR5100

Symbol	Description	TSR 520	TSR 530	TSR 540	TSR 550	TSR 560	TSR 580	TSR 5100	Unit	Conditions
C_J	Typical Junction Capacitance	380							ρF	V _R =4V, f=1MHz
R_{thJA}	Typical Thermal Resistance	10							°C / W	Note
T_J	Operating Junction Temperature Range	-65 to +125			-65 to +150				°C	
T_{STG}	Storage Temperature Range	-65 to +150								

Note: Thermal resistance junction to ambient vertical P.C. board mounting 0.5" (12.7mm) lead length.

Typical Characteristics Curves

Fig.1- Typical Forward Current Derating Curve

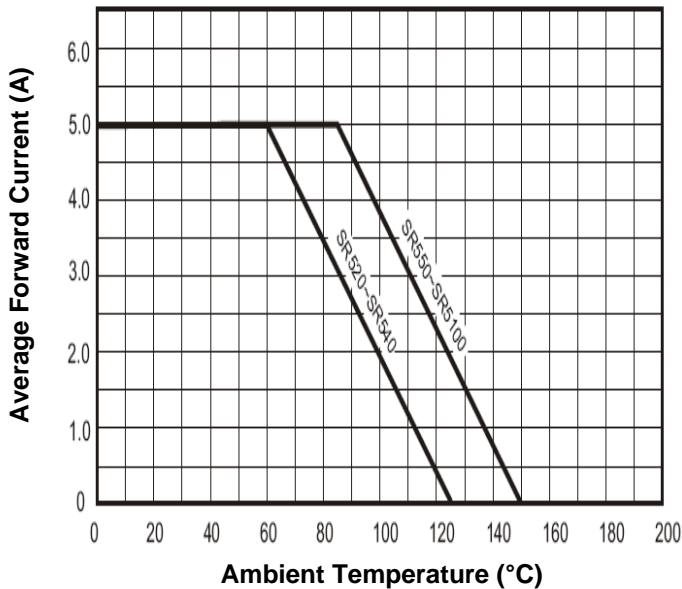
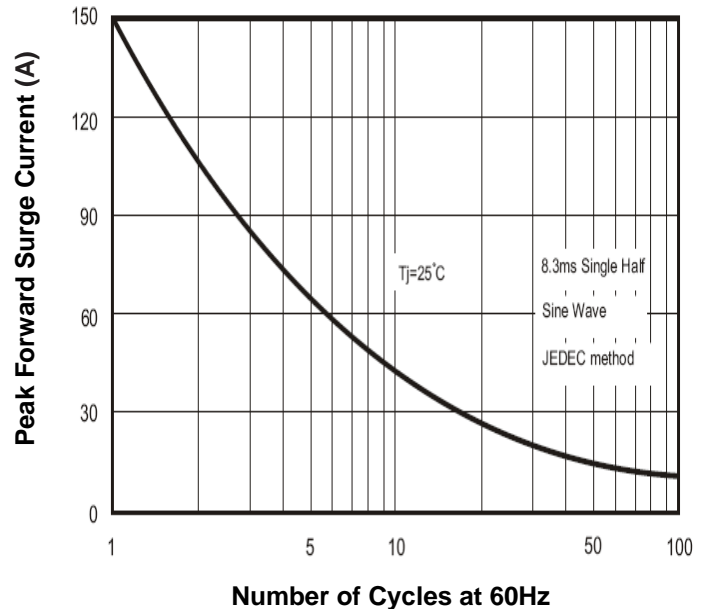


Fig.2- Maximum Non-repetitive Peak Forward Surge Current



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Fig.3- Typical Instantaneous Forward Characteristics

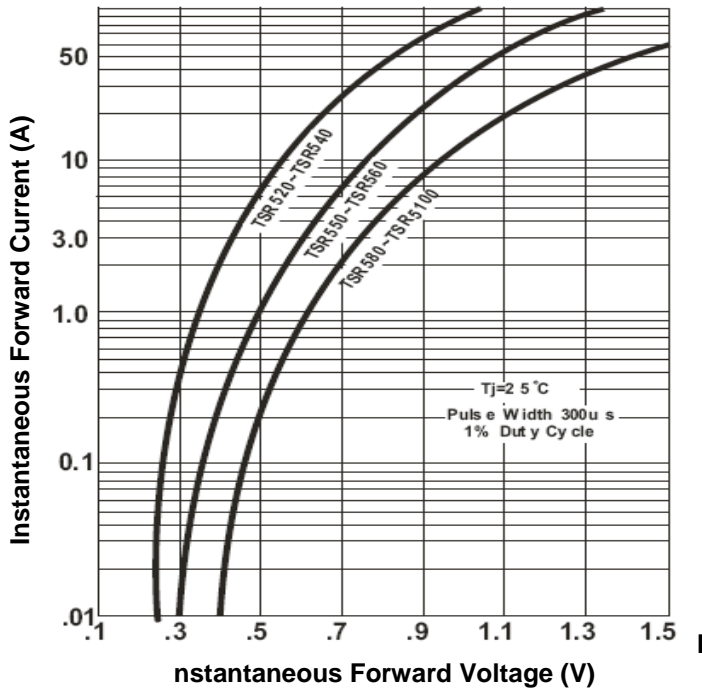


Fig.4- Typical Reverse Current

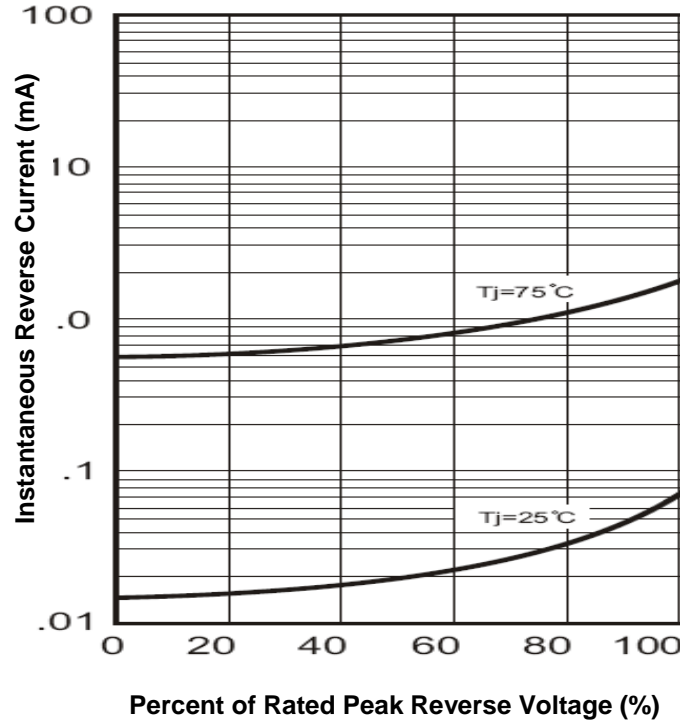
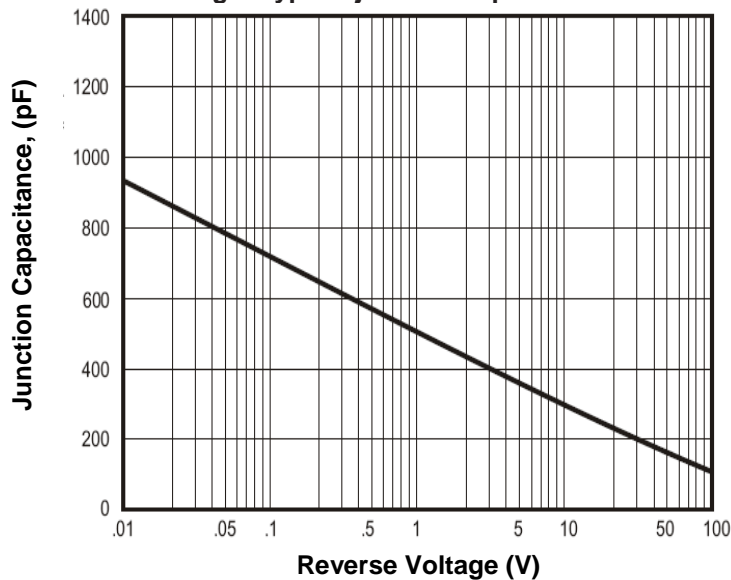


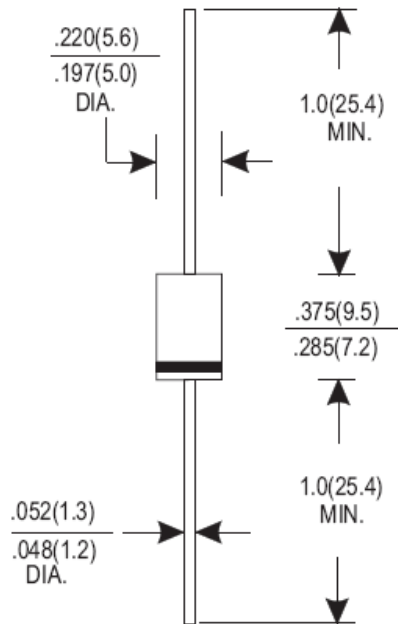
Fig.5-Typical junction capacitance



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Dimensions in inches (mm)



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