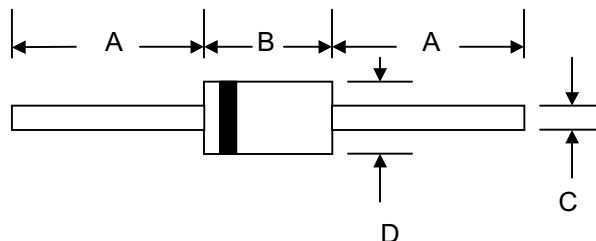


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Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- Green Products in Compliance with the RoHS Directive



Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

DO-201AD				
Dim	Min	Max	Min	Max
A	25.40	—	1.000	—
B	8.50	9.50	0.334	0.374
C	1.20	1.30	0.047	0.051
D	5.00	5.60	0.197	0.220
			In mm	In inch

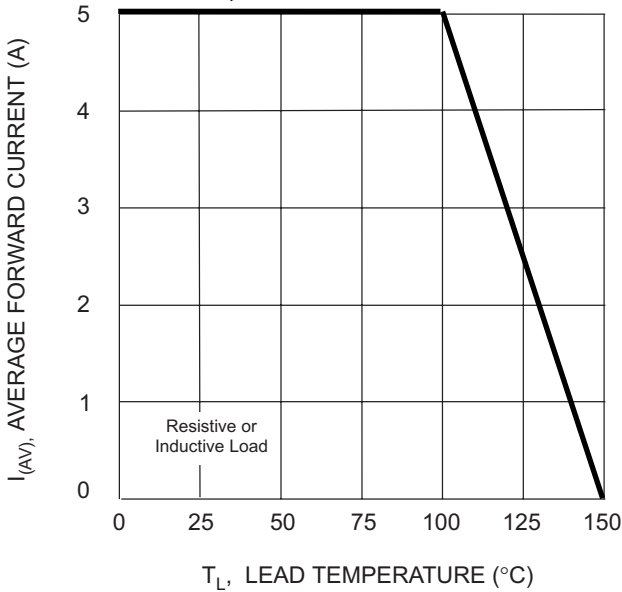
Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

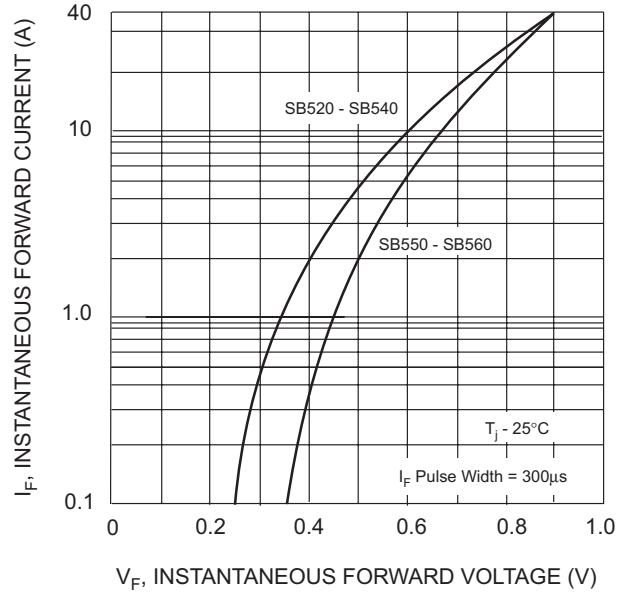
Characteristic	Symbol	SB520	SB530	SB540	SB550	SB560	Unit
Peak Repetitive Reverse Voltage	V _{RRM}						V
Working Peak Reverse Voltage	V _{RWM}	20	30	40	50	60	
DC Blocking Voltage	V _R						
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	35	42	V
Average Rectified Output Current (Note 1) @T _L = 100°C	I _O	5.0					A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150					A
Forward Voltage (Note 2) @I _F = 5.0A	V _{FM}	0.55		0.63		V	
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage (Note 2) @T _A = 100°C	I _{RM}	0.2					mA
		20					
Typical Junction Capacitance (Note 3)	C _j	550		400		pF	
Typical Thermal Resistance Junction to Ambient (Note 1) (Note 4)	R _{θJA}	25					K/W
	R _{θJL}	8					
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150					°C

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
2. Short duration test pulse used to minimize self-heating effect.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
4. Thermal resistance junction to lead vertical P.C.B. mounted, 0.375" (9.5mm) lead length.

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T_L , LEAD TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics

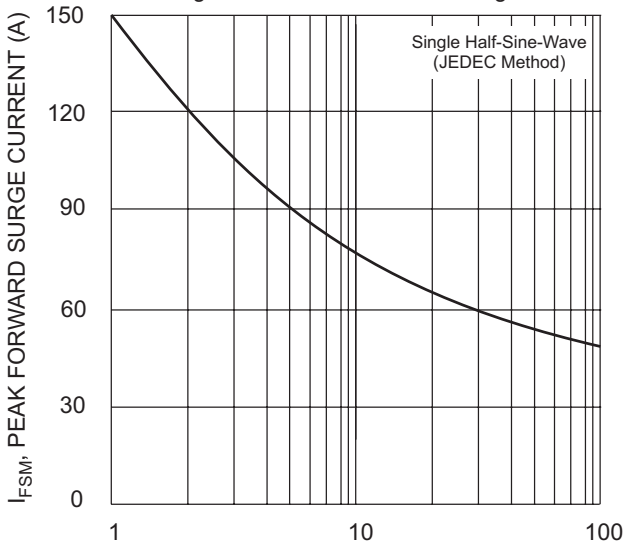


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

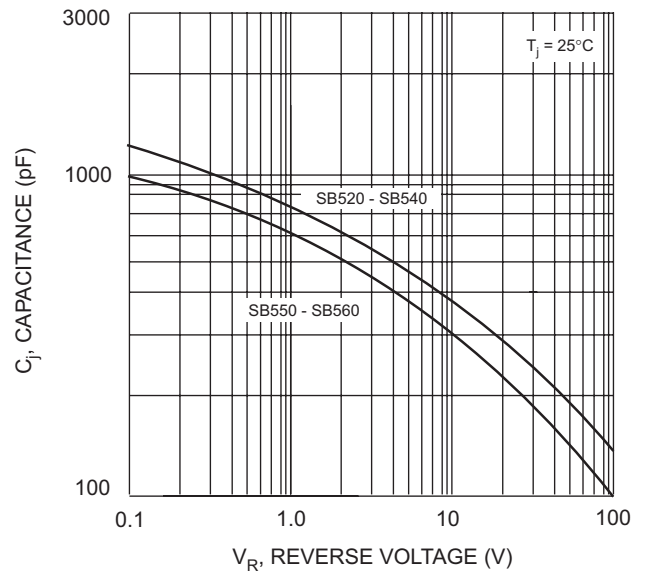


Fig. 4 Typical Junction Capacitance

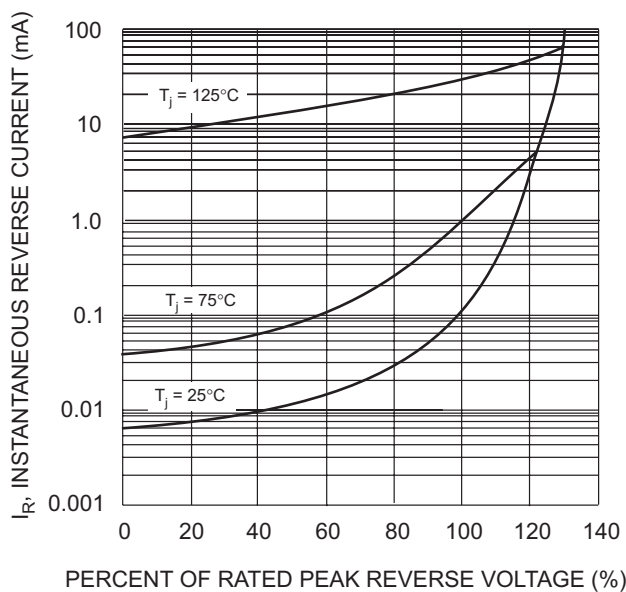


Fig. 5 Typical Reverse Characteristics

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