

# 5A Schottky Barrier Rectifiers

## PRODUCT SUMMARY

Voltage ratings available from 20 Volts to 60 Volts

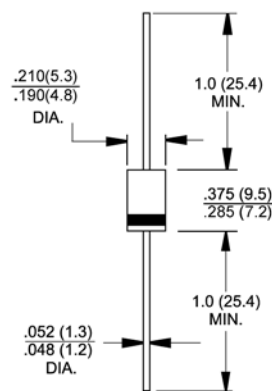
## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection

## MECHANICAL DATA

- Case: JEDEC DO-201AD molded plastic body
- Terminals: matte-Sn plated axial leads, solderable per MIL-STD-750, Method 2026
- High temperature soldering guaranteed:  
250°C for 10 seconds with 0.375" (9.5mm) lead length, 5lbs (2.3kg) tension
- Polarity: color band denotes cathode end
- Mounting position: Any
- Weight: 0.041 ounce, 1.15 grams

DO-201AD



Dimensions in inches and (millimeters)

 **Pb-free; RoHS-compliant**

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Rating at 25°C ambient temperature unless otherwise specified.
- Single phase, half wave, 60 Hz, resistive or inductive load.
- For capacitive load, derate current by 20%

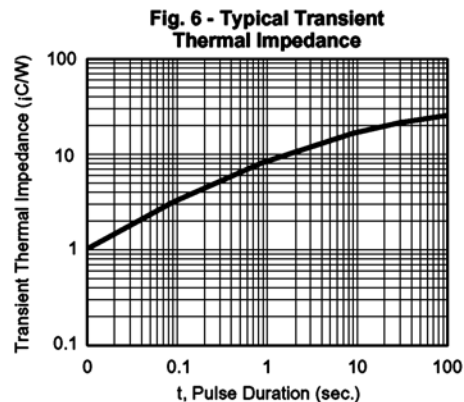
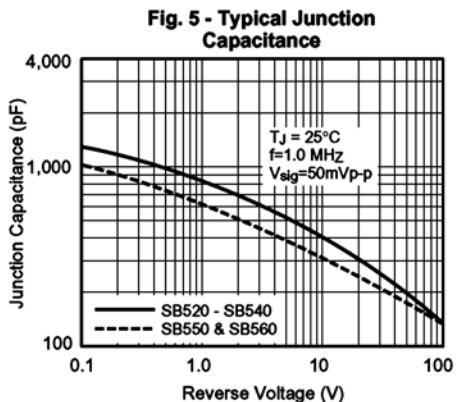
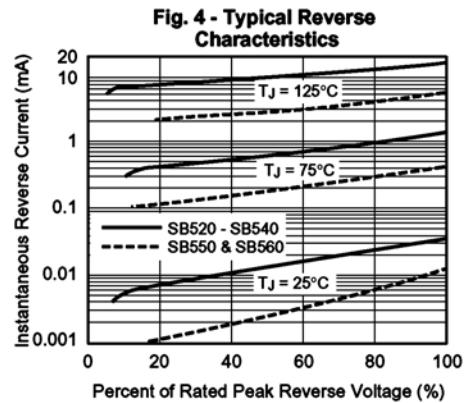
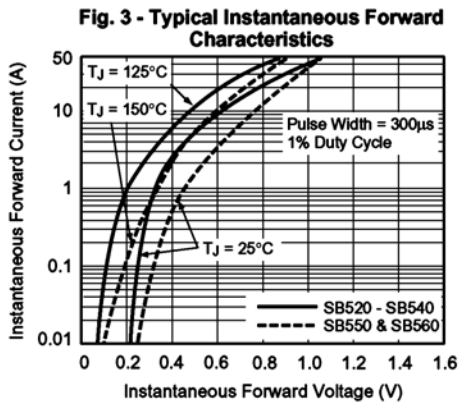
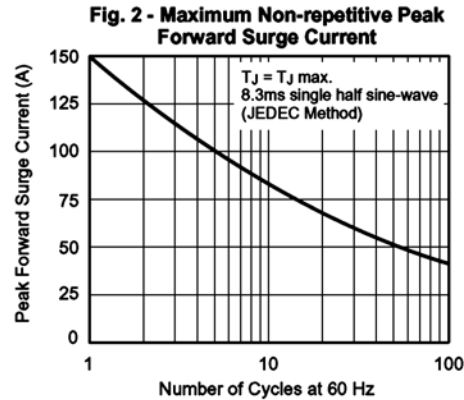
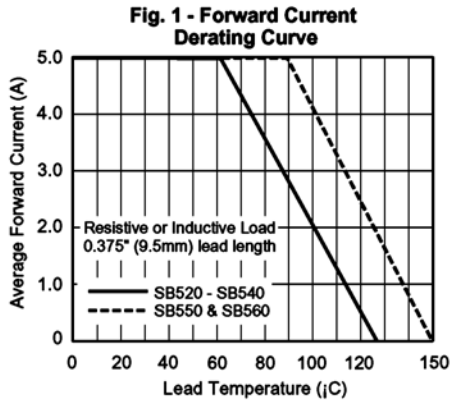
Parameter	Symbols	SB520	SB530	SB540	SB550	SB560	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length (See Fig.1)	$I_{F(AV)}$	5.0					Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at rated $T_c$	$I_{FSM}$	150.0					Amps
Max. instantaneous forward voltage at 5.0A (Note 1)	$V_F$	0.55			0.67		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note 1)	$I_R$	0.5		25			mA
		50		25			
Typical thermal resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JCL}$	25 8					°C/W
Operating junction temperature range	$T_J$	-55 to +125			-55 to +150		°C
Storage temperature range	$T_{STG}$	-55 to +150					°C

Notes: 1. Pulse test: 300us pulse width, 1% duty cycle

2. Thermal resistance junction to lead vertical P.C.B. mounted, 0.375" (9.5mm) lead length

## RATINGS AND CHARACTERISTIC CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise noted)



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