

5A Schottky Barrier Rectifiers

PRODUCT SUMMARY

Voltage ratings available from 20 Volts to 60 Volts

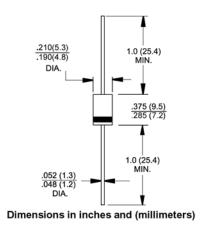
FEATURES

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



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 _L	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 @T₄= 25°C	I _R	0.5					mA.
at rated DC blocking voltage (Note 1) @T _A =100°C			50			25	IIIA
Typical thermal resistance (Note 2)	$R_{_{\theta JA}} \ R_{_{\theta JL}}$	25 8					°C/W
Operating junction temperature range	Tj	-55 to +125			-55 to	-55 to +150	
Storage temperature range	T _{stg}	-55 to +150					°C

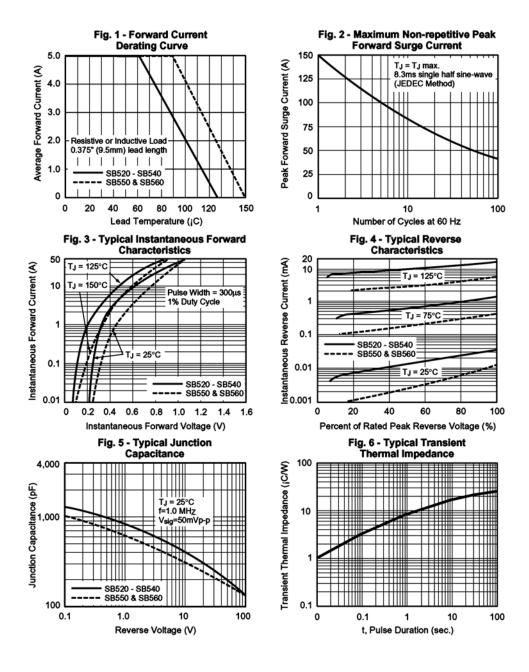
Notes: 1. Pulse test: 300us pulse width, 1% duty cycle

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



RATINGS AND CHARACTERISTIC CURVES

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



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