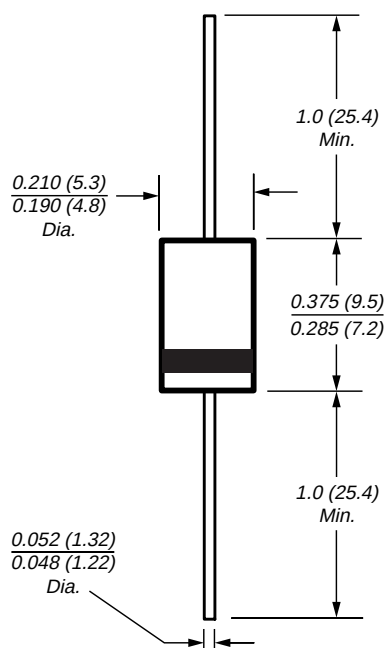




Schottky Barrier Rectifier

Reverse Voltage 20 to 60V
Forward Current 3.0A

DO-201AD



Dimensions in inches and (millimeters)

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:** Plated axial leads, solderable per MIL-STD-750, Method 2026High temperature soldering guaranteed:
250°C/10 seconds 0.375" (9.5mm) lead length,
5lbs. (2.3kg) tension**Polarity:** Color band denotes cathode end**Mounting Position:** Any**Weight:** 0.04oz., 1.12gMaximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	SB320	SB330	SB340	SB350	SB360	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	V
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	V
Maximum average forward rectified current at 0.375 (9.5mm) lead length (See Fig.1)	I _{F(AV)}	3.0					A
Peak forward surge current 8.3μs single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	100					A
Typical thermal resistance ⁽²⁾	R _{θJA} R _{θJL}	30 10					°C/W
Operating junction temperature range	T _J	−65 to +125			−65 to +150		°C
Storage temperature range	T _{STG}	−65 to +150					°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	SB320	SB330	SB340	SB350	SB360	Unit
Maximum instantaneous forward voltage at 3.0A ⁽¹⁾	V _F	0.50			0.74		V
Maximum instantaneous reverse current at rated DC blocking voltage ⁽¹⁾	I _R	0.5					mA
		20			10		

Notes: (1) Pulse test: 300μs pulse width, 1% duty cycle

(2) Thermal resistance from junction to lead vertical P.C.B. mounting, 0.500" (12.7mm) lead length with 2.5 x 2.5" (63.5 x 63.5mm) copper pad

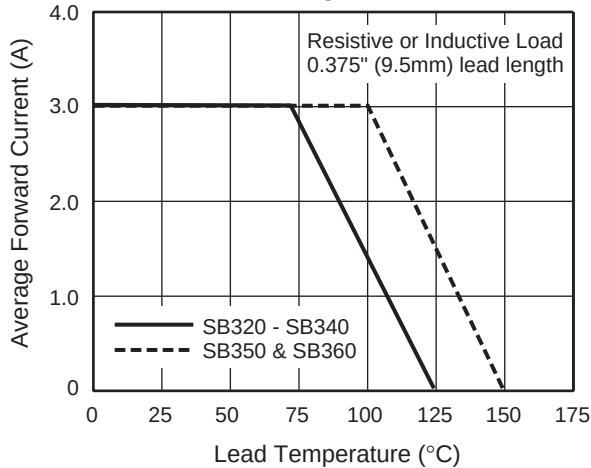
SB320 thru SB360

Vishay Semiconductors
formerly General Semiconductor

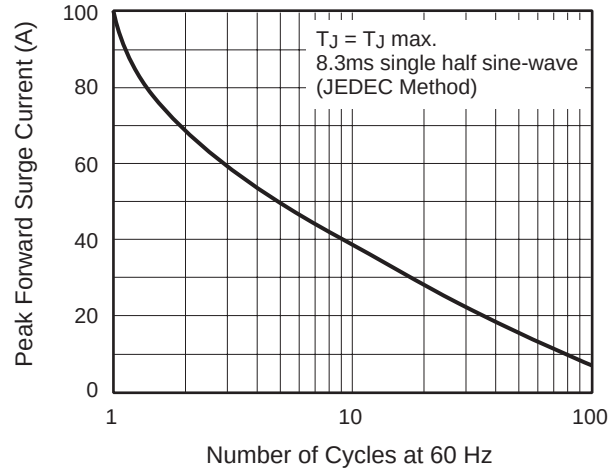


Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

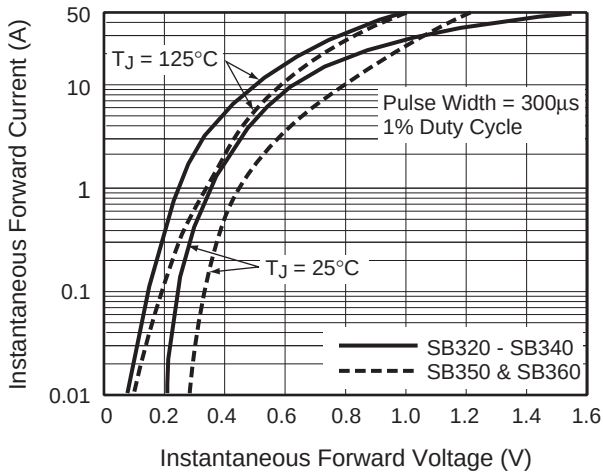
**Fig. 1 - Forward Current
Derating Curve**



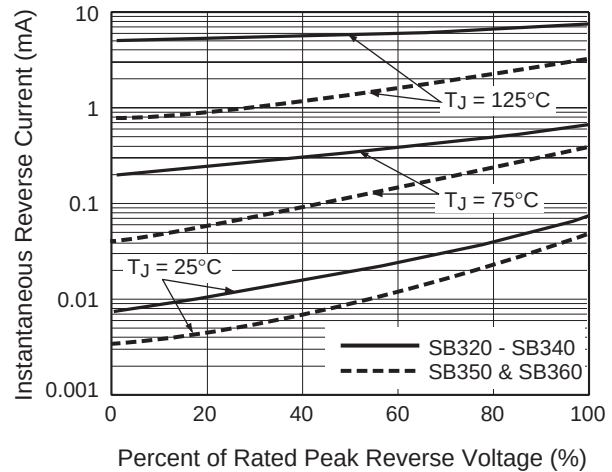
**Fig. 2 - Maximum Non-repetitive Peak
Forward Surge Current**



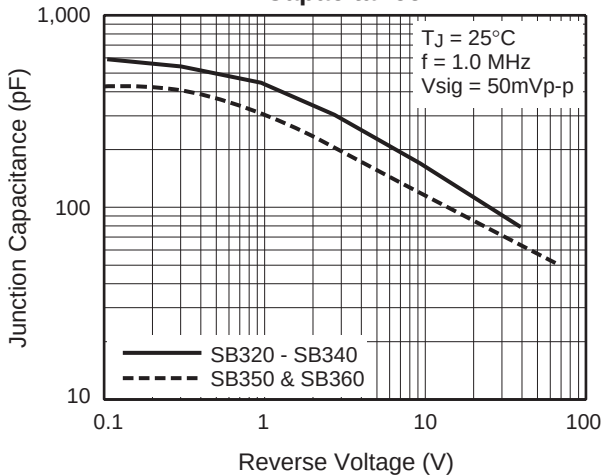
**Fig. 3 - Typical Instantaneous Forward
Characteristics**



**Fig. 4 - Typical Reverse
Characteristics**



**Fig. 5 - Typical Junction
Capacitance**



**Fig. 6 - Typical Transient
Thermal Impedance**

