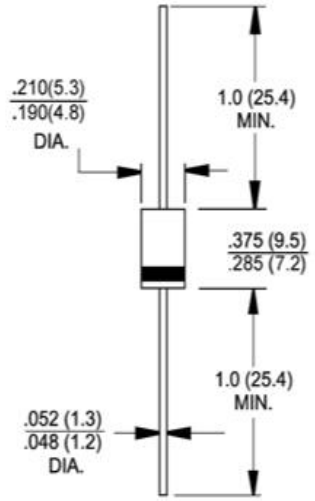
SB320 thru SB360

Schottky Barrier Rectifiers
Reverse Voltage 20 to 60 Volts Forward Current 3.0 Amperes

Features

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

DO-201AD



Dimensions in inches and (millimeters)

Mechanical Data

- Case : JEDEC DO-201AD molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.041 ounce, 1.15 grams
- Mounting position : Any

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.

PARAMETER		SYMBOL	SB320	SB330	SB340	SB350	SB360	UNIT
Maximum repetitive peak reverse voltage		VRRM	20	30	40	50	60	V
Maximum RMS voltage		VRMS	14	21	28	35	42	V
Maximum DC blocking voltage		VDC	20	30	40	50	60	V
Maximum average forward rectified current at TL(see Fig.1)		IF(AV)	3					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		IFSM	100					A
Maximum forward voltage at 3.0A DC		VF	0.50			0.70		V
Maximum DC reverse current at rated DC blocking voltage	Tj=25℃	IR	0.15					mA
	Tj=125℃		15					
Typical thermal resistance junction to ambient(Note1)		$R_{\theta JA}$	40					°C/W
Typical thermal resistance junction to lead(Note1)		$R_{\theta JL}$	18					°C/W
Typical thermal resistance junction to case(Note1)		$R_{\theta JC}$	23					°C/W
Typical junction capacitance.Measured at 1.0MHz and applied reverse voltage of 4.0V DC		Cj	250					pF
Operating junction temperature range		TJ	- 55 to + 125			- 55 to + 150		°C
Storage temperature range		TSTG	- 55 to + 150					°C

Note: 1. Thermal Resistance at .375"(9.5mm)Lead Length, PC Board Mounted.

RATINGS AND CHARACTERISTIC CURVES

(T_A = 25°C unless otherwise noted)

FIG.1 - FORWARD CURRENT DERATING CURVE

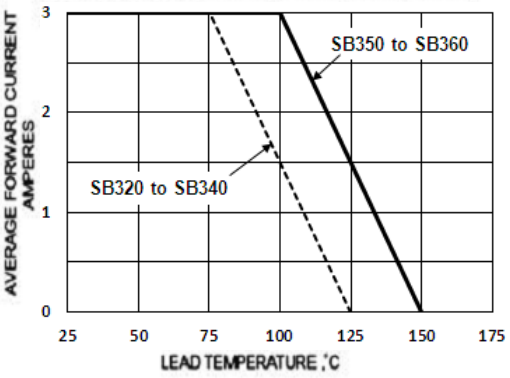


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

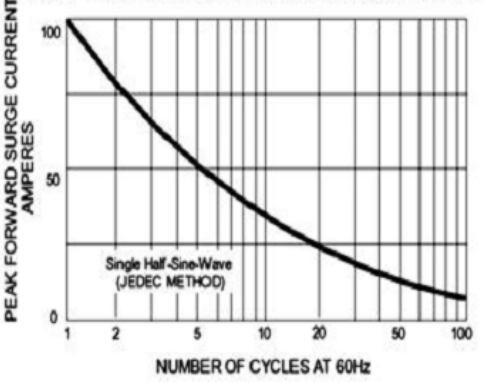


FIG.3 - TYPICAL JUNCTION CAPACITANCE

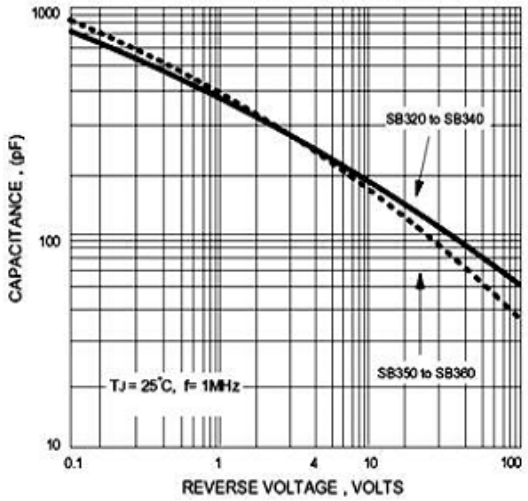


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

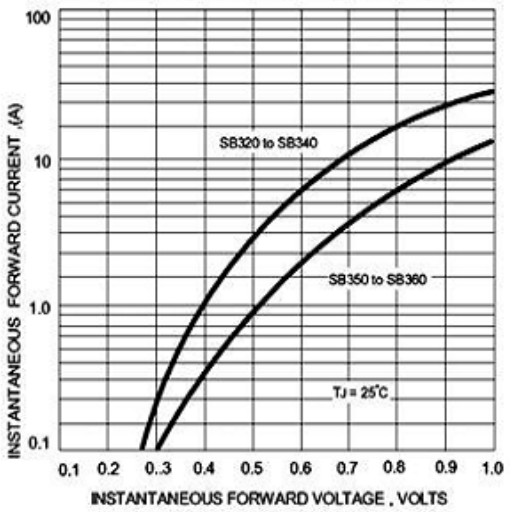


FIG.5 - TYPICAL REVERSE CHARACTERISTICS