

Voltage Current 20 V to 200 V 3.0 A

FEATURES

- Low power losses, high efficiency
- High surge current capability
- High frequency operation
- Guarding for overvoltage protection
- Low forward voltage drop
- Solder dip 260°C, 10s
- Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC

(Pb)

RoHS COMPLIANT

HALOGEN FREE

MECHANICAL DATA

- Case: DO-201AD (DO-27). Epoxy meets UL 94V-0 flammability rating.
- Polarity: Color band denotes cathode end.
- Terminals: Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test

TYPICAL APPLICATIONS

Used in low voltage high frequency inverters, freewheeling, dc-to-dc converters, and polarity protection applications.

Maximum Ratings and Electrical Characteristics at 25 °C

		SB320	SB340	SB350	SB360	SB390	SB3100	SB3150	SB3200
Marking Code		SB320	SB340	SB350	SB360	SB390	SB3100	SB3150	SB3200
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	20	40	50	60	90	100	150	200
V _{RMS}	Maximum RMS Voltage (V)	14	28	35	42	63	70	105	140
V _{DC}	Maximum DC Blocking Voltage (V)		40	50	60	90	100	150	200
I _{F(AV)}	Maximum Average Forward Rectified Current (See graphic)	3.0 A							
I _{FSM}	8.3 ms.Peak Forward Surge Current (Jedec Method)	80 A							
Cj	Typical Junction Capacitance (Note 2)	200 pF		130 pF		90 pF			
T _j	Operating Temperature Range	-55 to +125 °C		-55 to +150 °C					
T _{stg}	Storage Temperature Range	-55 to +150 °C							

Electrical Characteristics at Tamb = 25 °C

V _F	Maximum Instantaneous Forward Voltage $I_F = 3.0 \text{ A}$ (Note 1)	0.55 V	0.70 V	0.85 V	0.95 V	
l _s	Maximum DC Reverse Current Tj = 25 °C (Note 3)		mA	0.1 mA		
I _R	at Rated DC Blocking Voltage Tj =125°C	20 mA	10 mA	3.0 mA		
R _{th (j-a)} R _{th (j-c)}	Typical Thermal Resistance (Note 2)	50 °C/W 20 °C/W				

Revision: 1

Notes: 1. Pulse Test: 300µ Pulse Width, 1% Duty Cycle

2. Thermal Resistance from Junction to Case per diode

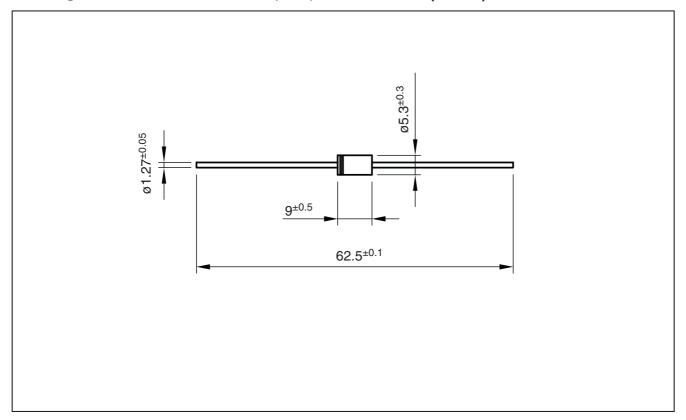
3. Pulse test: Pulse width ≤ 40ms



Ordering information

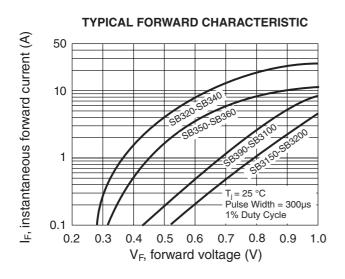
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)	
SB360 AMP	AMP	AMMO BOX	800	1.100	
SB360 TR	TR	13" diameter tape and reel	1,200	1.100	
SB360 HF AMP	AMP	AMMO BOX	800	1.100	
SB360 HF TR	TR	13" diameter tape and reel	1,200	1.100	

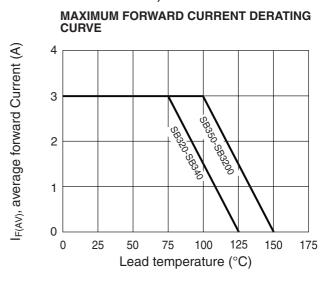
Package Outline Dimensions: (mm) DO-201AD (DO-27)

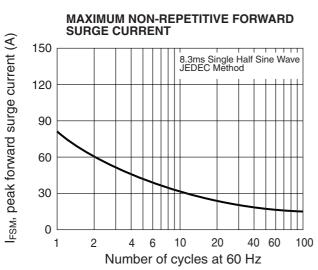


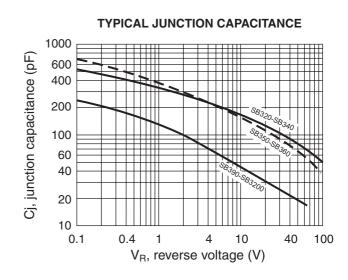


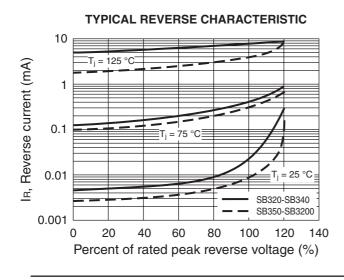
Ratings and Characteristics (Ta 25 °C unless otherwise noted)

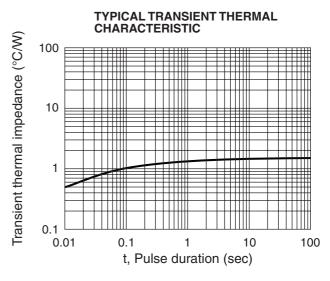














Revision History

Date Revision		Description of Changes				
14-May-2012	0	Original Data Sheet				
03-Nov-2014 1		Update IR specifications at temperature				

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