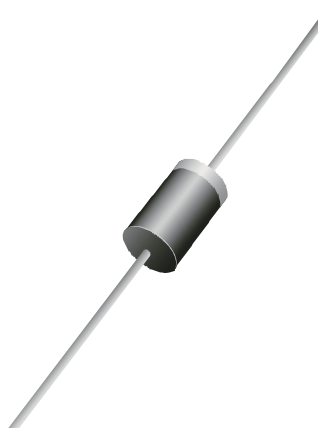





5.0 Amp. Schottky Barrier Rectifier

 <p>DO-201AD (DO-27)</p>	Voltage 20 V to 200 V	Current 5.0 A	
	FEATURES <ul style="list-style-type: none"> • 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 • AEC-Q101 qualified • Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC 		  RoHS COMPLIANT 
	MECHANICAL DATA <ul style="list-style-type: none"> • 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

		SB 520	SB 540	SB 560	SB 5100	SB 5150	SB 5200
Marking Code		SB520	SB540	SB560	SB5100	SB5150	SB5200
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	20	40	60	100	150	200
V_{RMS}	Maximum RMS Voltage (V)	14	28	42	70	105	140
V_{DC}	Maximum DC Blocking Voltage (V)	20	40	60	100	150	200
$I_{F(AV)}$	Max. Average Forward Rectifier Current (See graphic)	5.0 A					
$I_{F(RMS)}$	Forward RMS Current	7.0 A					
I_{FSM}	8.3 ms. Peak Forward Surge Current (Jedec Method)	120 A					
C_j	Typical Junction Capacitance	250 pF	210 pF	120 pF			
T_j	Operating Temperature Range	-55°C to +150°C					
T_{stg}	Storage Temperature Range	-55°C to +150°C					

Electrical Characteristics at Tamb = 25 °C

V_F	Maximum Instantaneous Forward Voltage $I_F = 5.0 A$ (Note 1)	0.55 V	0.67 V	0.80 V	0.90 V
I_R	Maximum D.C. Reverse Current @ $T_j = 25^\circ C$ at Rated DC Blocking Voltage @ $T_j = 125^\circ C$ (Note 3)	0.5 mA		0.1 mA	
		20 mA	15 mA	10 mA	5 mA
$R_{th(j-a)}$ $R_{th(j-c)}$	Typical Thermal Resistance (Note 2)	40 °C/W 25 °C/W			

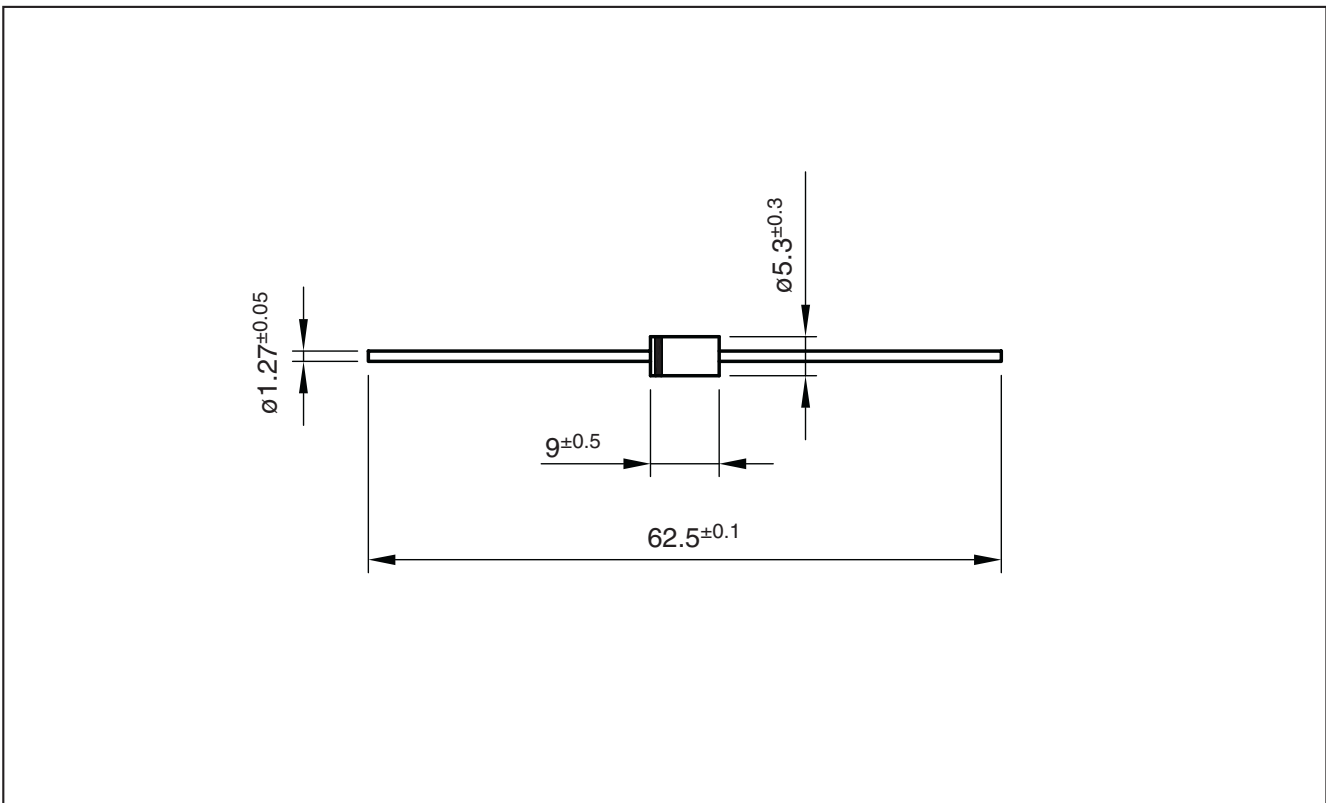
- Notes: 1. Pulse Test: 300µ Pulse Width, 1% Duty Cycle
 2. Thermal Resistance from Junction to Case per diode
 3. Pulse test: Pulse width ≤ 40ms

5.0 Amp. Schottky Barrier Rectifier

Ordering information

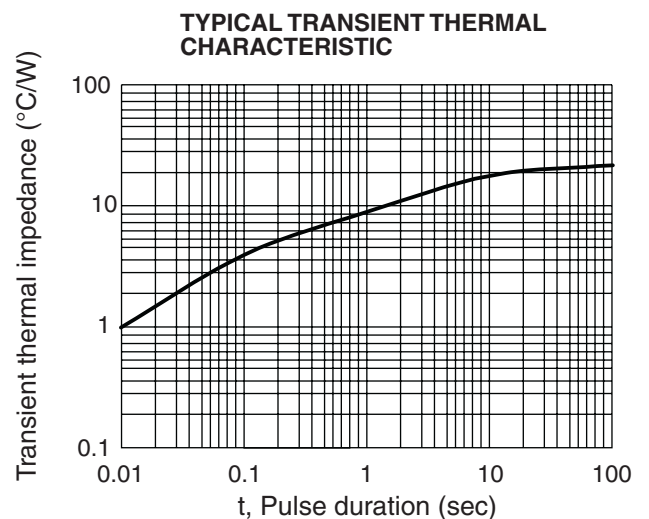
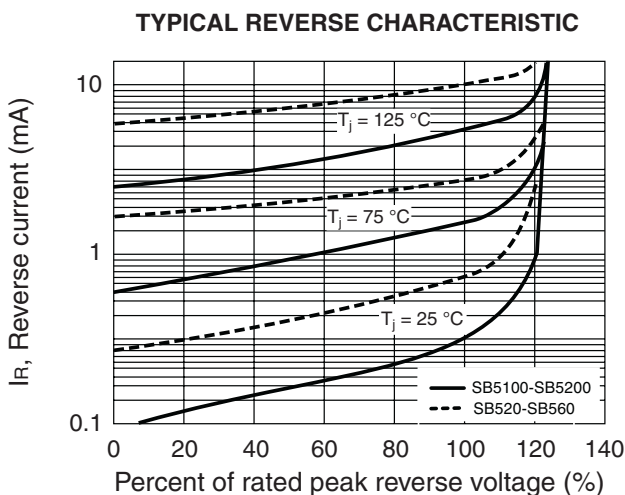
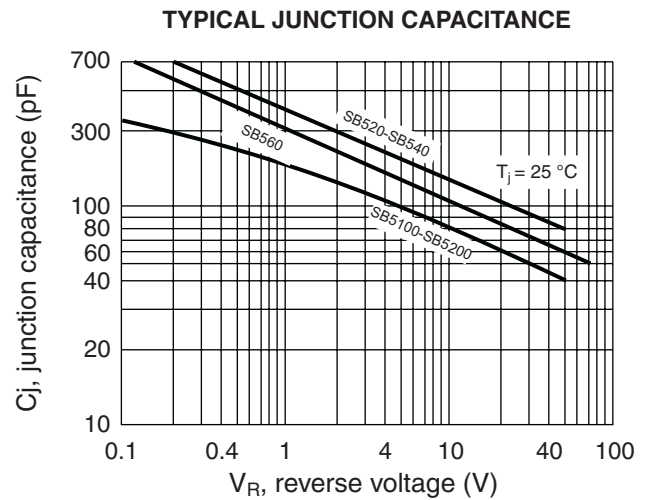
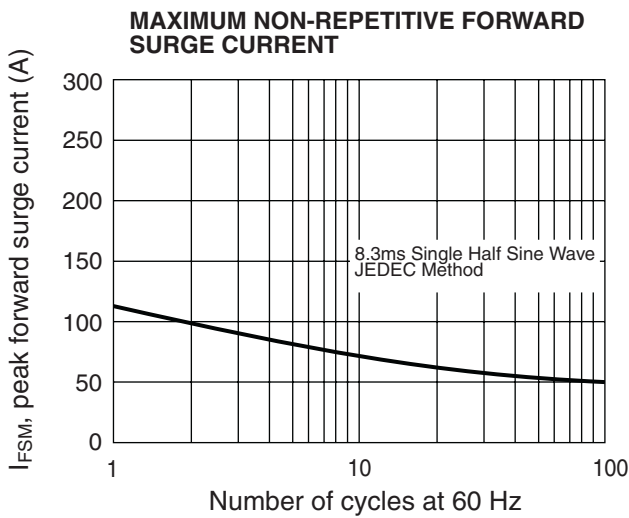
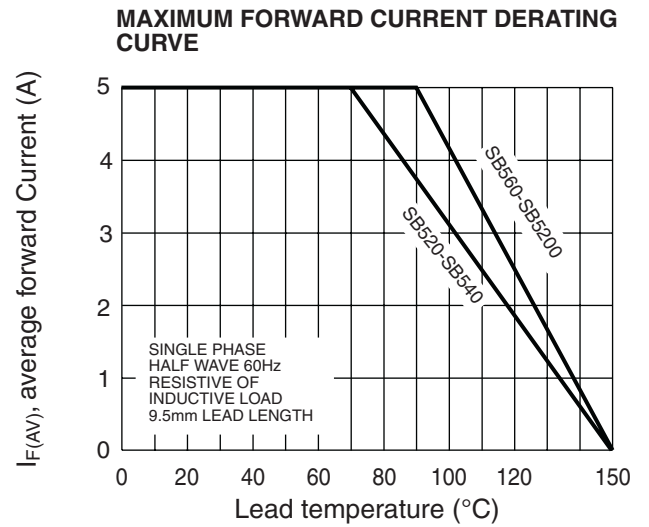
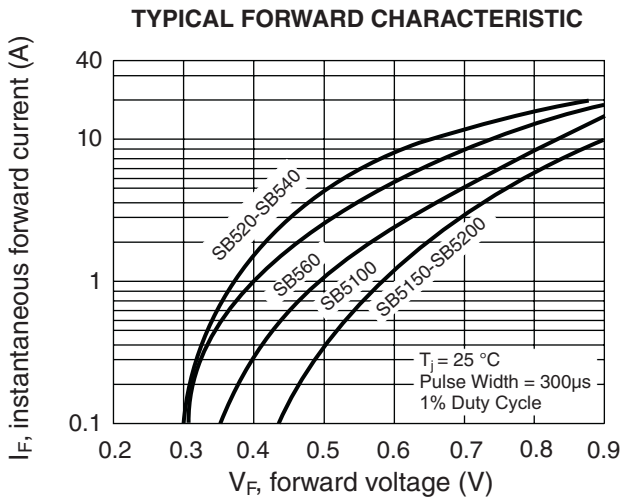
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
SB560 AMP	AMP	AMMO BOX	800	1.100
SB560 TR	TR	13" diameter tape and reel	1,200	1.100
SB560 HF AMP	AMP	AMMO BOX	800	1.100
SB560 HF TR	TR	13" diameter tape and reel	1,200	1.100

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



5.0 Amp. Schottky Barrier Rectifier

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



5.0 Amp. Schottky Barrier Rectifier

Revision History

Date	Revision	Description of Changes
15-Jan-2012	0	Original Data Sheet
7-Feb-2014	1	Modified: Package Outline dimensions & Tj, Tstg, IR, Rth(j-a)/Rth(j-c)
19-Feb-2014	2	Modified: IF (RMS) included
19-Dec-2014	3	Modified: Electrical Characteristics (VF, IR) at temperature

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