

## SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 20 to 200 Volts  
FORWARD CURRENT - 8.0 Amperes

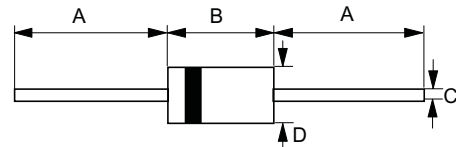
### FEATURES

- 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

### MECHANICAL DATA

- Case : JEDEC DO-201AD molded plastic
- Polarity : Color band denotes cathode
- Weight : 1.071 grams
- Mounting position : Any

### DO-201AD



DO-201AD		
Dim.	Min.	Max.
A	25.4	-
B	8.50	9.50
C	1.20	1.30
D	5.00	5.60
All Dimensions in millimeter		

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	SB 820	SB 830	SB 840	SB 850	SB 860	SB 880	SB 8100	SB 8150	SB 8200	UNIT	
Maximum repetitive peak reverse voltage	VRRM	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	VRMS	14	21	28	35	42	56	70	105	140	V	
Maximum DC blocking voltage	VDC	20	30	40	50	60	80	100	150	200	V	
Maximum average forward rectified current	I <sub>F</sub>	8									A	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	130									A	
Maximum instantaneous @25 @100	V <sub>F</sub>	0.55		0.70		0.85		0.90		V		
Maximum DC Reverse Current @25 at Rated DC Blocking Voltage @100	I <sub>R</sub>	0.5			15.0			0.2		5.0		mA
Typical Junction Capacitance	C <sub>J</sub>	350		270		200		170		pF		
Typical Thermal Resistance	R <sub>JA</sub>	60									/W	
Operating Temperature Range	T <sub>J</sub>	-55 to +125										
Storage Temperature Range	T <sub>STG</sub>	-55 to +150										

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

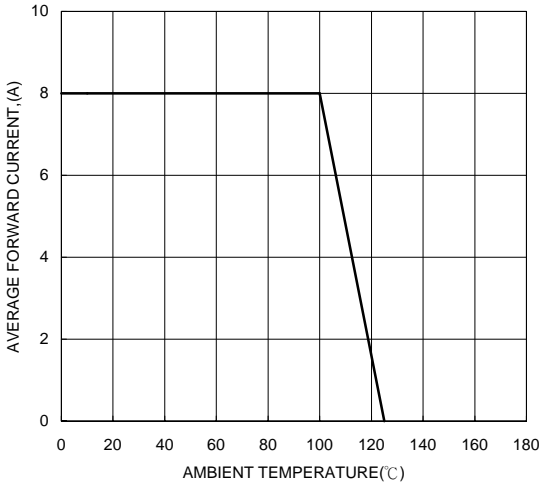


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

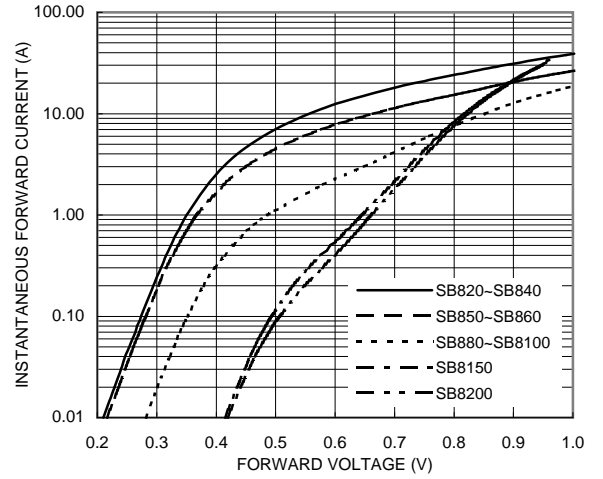


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

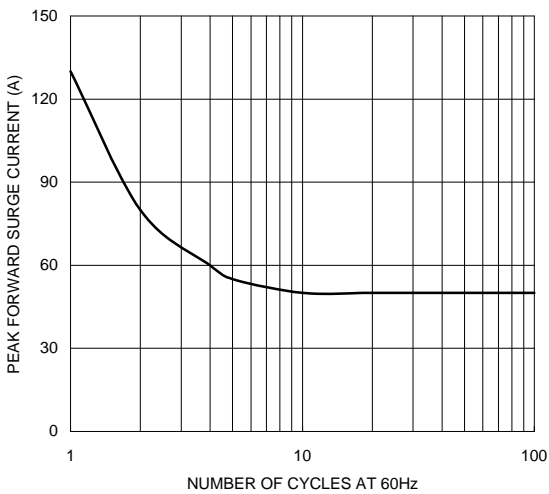


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

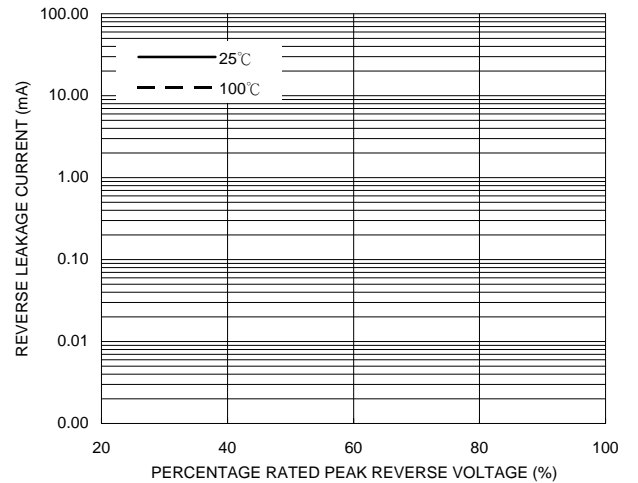


FIG. 5-TYPICAL JUNCTION CAPACITANCE

