



SB220 thru SB260

Schottky Barrier Rectifiers

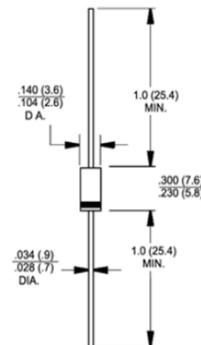
Reverse Voltage 20V to 60V Forward Current 2.0A Amperes

Features

- Metal-Semiconductor junction with guardring
- 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-204AC (DO-15)



Mechanical Data

- Case: JEDEC DO-204AC(DO-15) molded plastic
- Polarity: Color band denotes cathode end
- Weight: 0.014 ounce, 0.39 gram
- 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.

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	SB220	SB230	SB240	SB250	SB260	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 @ T _A =75°C	IF(AV)	2.0						A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	60						A
Maximum forward voltage at 2A DC Maximum forward voltage at 1.5A DC	VF	0.5			0.70 0.65		V	
Maximum DC reverse current at rated DC blocking voltage ⁽¹⁾	T _J =25°C	0.1					mA	
	T _J =125°C	10						
Typical junction capacitance (Note 1)	C _J	150					pF	
Typical thermal resistance(Note 2)	R _{θJA}	85					°C/W	
	R _{θJC}	45						
	R _{θJL}	40						
Operating junction temperature range	T _J	- 55 to + 125			- 55 to + 150		°C	
Storage temperature range	T _{STG}	- 55 to + 150					°C	

Notes: 1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

2. Thermal Resistance at .375(9.5mm) Lead Length, PC Board Mounted

RATINGS AND CHARACTERISTICS CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

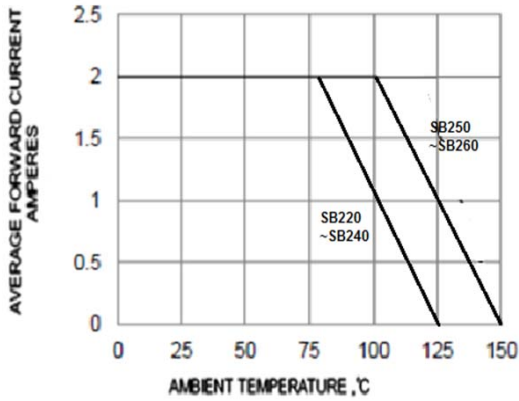


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

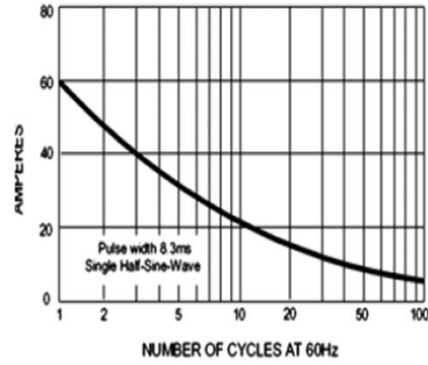


FIG.3 - TYPICAL JUNCTION CAPACITANCE

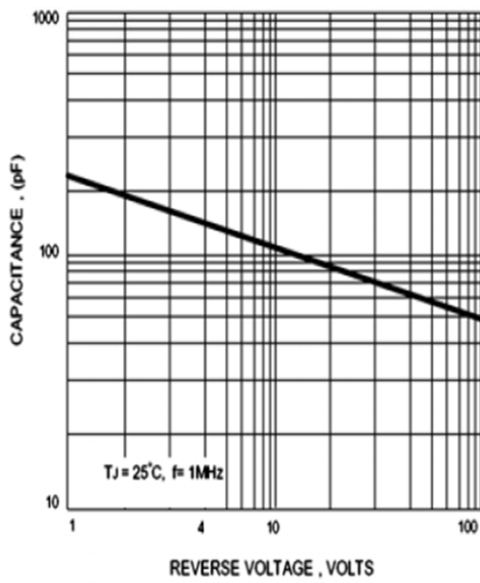


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

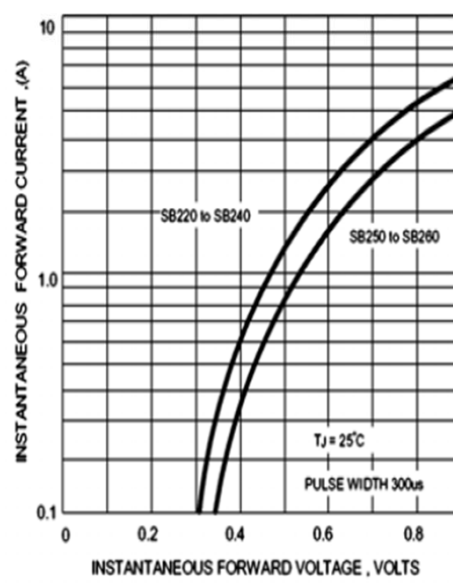


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

