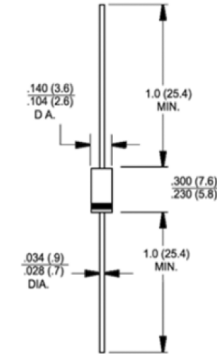


Features

- Metal-Semiconductor junction with guarding
- 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)

Dimensions in inches and (millimeters)

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.

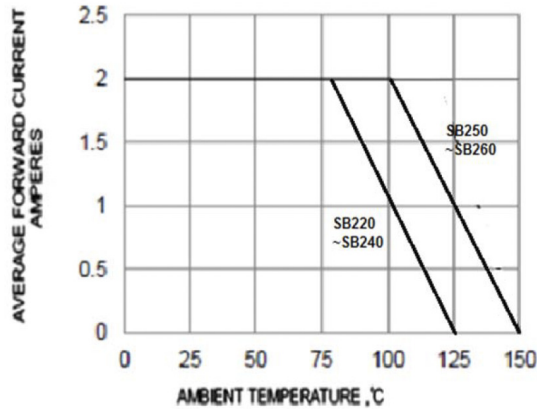
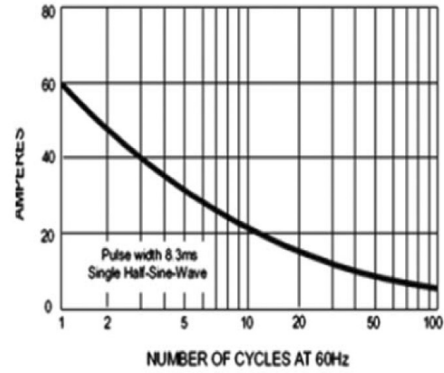
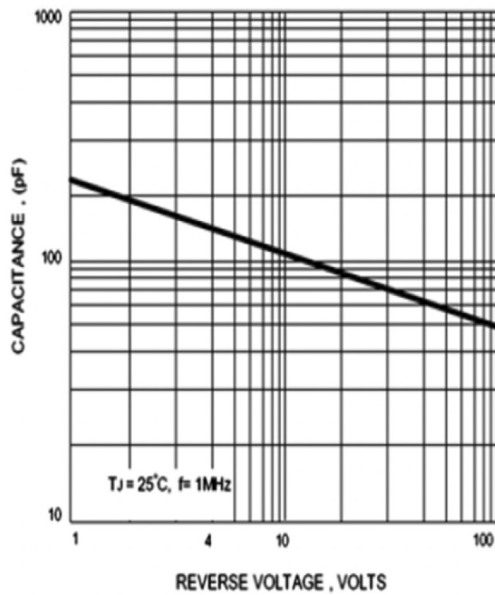
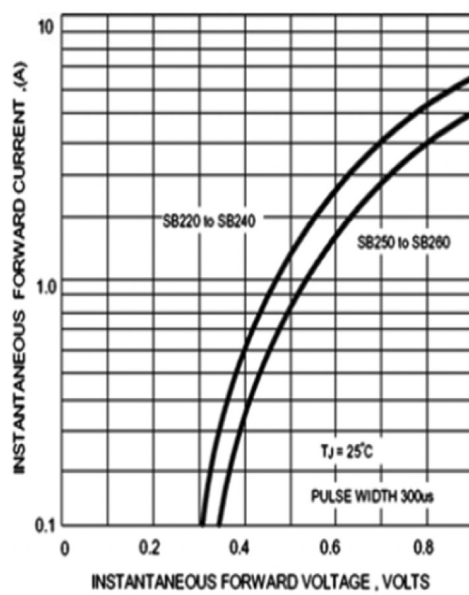
Single phase, half wave, 60HZ, resistive or inductive load.

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	IR	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
