

## SB220 thru SB2100

### 1.Feature & Dimensions

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* Low power loss,high efficiency
- \* For use in low voltage high frequency inverters, free wheeling,and polarity protection applications
- \* Guarding for over voltage protection
- \* High temperature soldering guaranteed: 260°C/10 seconds at terminals

### 2.Mechanical Data

**Case:** JEDEC DO-15, molded plastic over glass body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.015 oz., 0.40 g

**Handling precautin:**None

### 3.Electrical Characteristic

**Maximum Ratings & Thermal Characteristics Ratings** at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SB220	SB230	SB240	SB250	SB260	SB280	SB2100	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum average forward rectified current 0.375" (9.5mm) lead length (See fig. 1)	$I_{F(AV)}$	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60							A
Typical thermal resistance (Note 1)	$R_{\theta JA}$	50							°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-40 to +125							°C

**Electrical Characteristics Ratings** at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SB220	SB230	SB240	SB250	SB260	SB280	SB2100	Unit
Maximum instantaneous forward voltage at 2.0A	$V_F$	0.50			0.70		0.84		V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 100^\circ\text{C}$	$I_R$	0.5 20							mA
Typical junction capacitance at 4.0V, 1MHz	$C_J$	170							PF

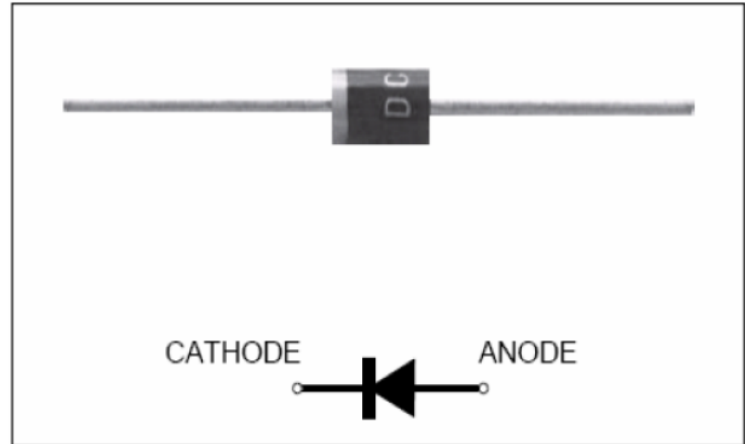
NOTES:

1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

### Schottky Barrier Rectifiers

Reverse Voltage 20 to 100V

Forward Current 2.0A



We declare that the material of product compliance with RoHS requirements.

### 4. Characteristic Curves ( TA = 25°C unless otherwise noted )

Fig. 1 - Forward Current Derating Curve

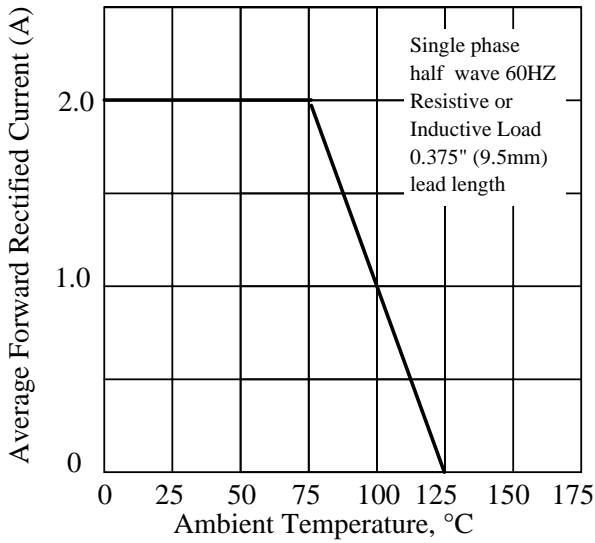


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

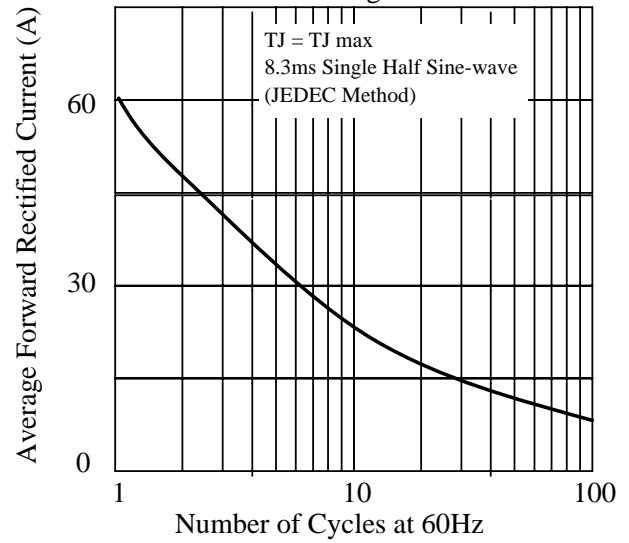


Fig. 3. - Typical Instantaneous Forward Characteristics

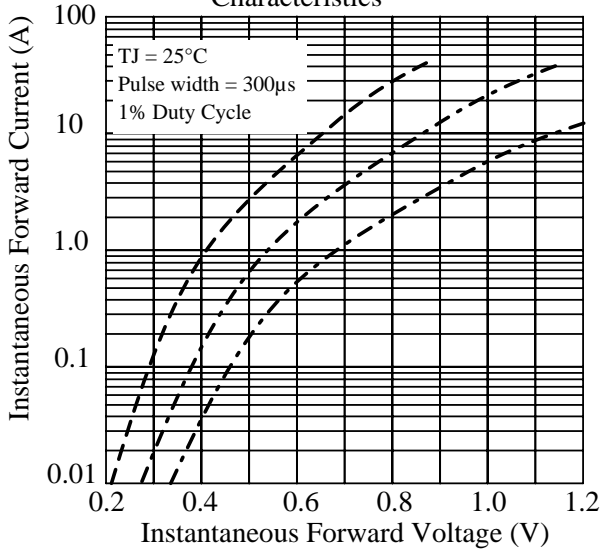


Fig 4. - Typical Reverse Characteristics

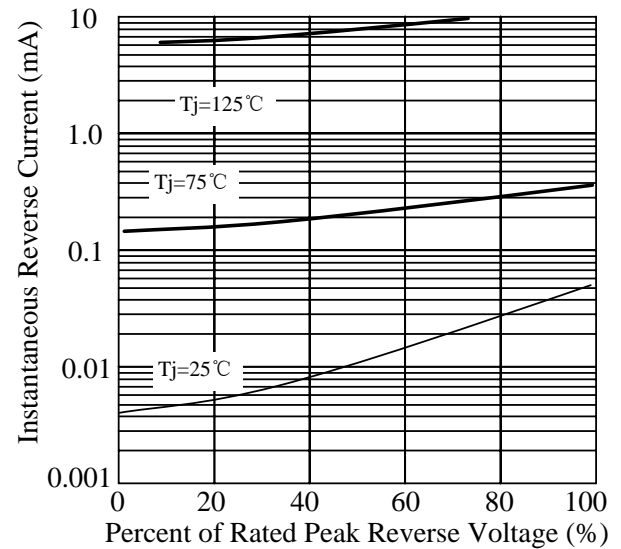


Fig 5. - typical transient thermal impedance

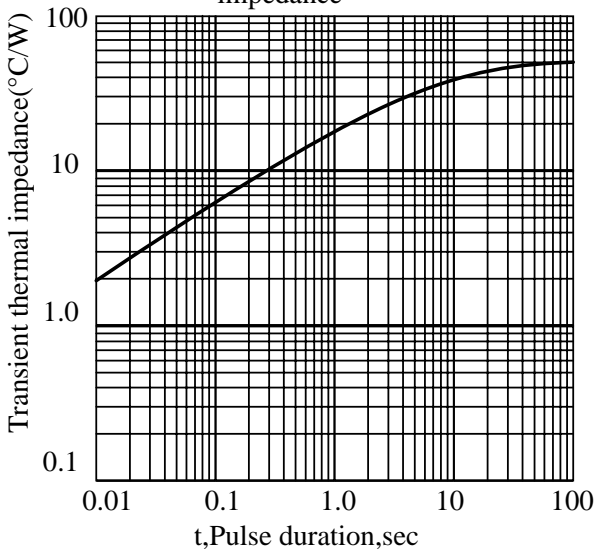
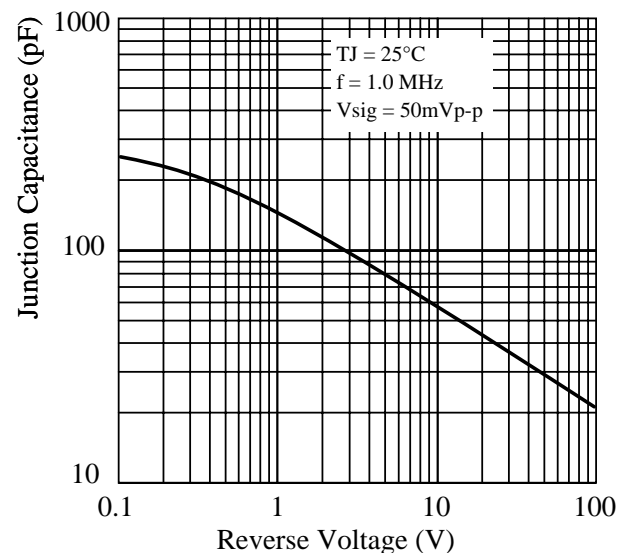


Fig 6. - Typical Junction Capacitance



**5.Package Dimensions in inches and (millimeters)**
