

# SB2150&SB2200

Schottky Barrier Rectifiers

Reverse Voltage 150V&200V Forward Current 2.0A

## 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

## Mechanical Data

**Case:** JEDEC DO-15, molded plastic over sky die

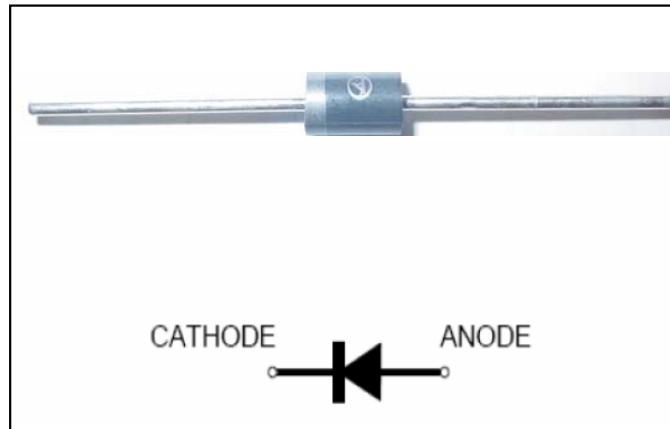
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

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

**Handling precaution:** None



We declare that the material of product compliance with ROHS requirements

## 1. Electrical Characteristic

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

Parameter Symbol	symbol	SB2150	SB2200	Unit
device marking code		SB2150	SB2200	
Maximum repetitive peak reverse voltage	$V_{RRM}$	150	200	V
Maximum RSM voltage	$V_{RSM}$	105	140	V
Maximum DC blocking voltage	$V_{DC}$	150	200	V
Maximum average forward rectified current 0.375" (9.5mm) lead length (See fig. 1)	$IF(AV)$	2.0		
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60		
thermal resistance, junction to ambient	$R_{\theta JA}$	50		
thermal resistance, junction to case	$R_{\theta JC}$	5		
Operating temperature range	$T_J$	-55 to +150		
storage temperature range	$T_{STG}$	-55 to +150		

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

Parameter Symbol	symbol	SB2150	SB2200	Unit
Maximum instantaneous forward voltage at 2.0A	$V_F$	0.87		
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 100°C	$IR$	0.1 5		
Typical junction capacitance at 4.0V, 1MHz	$C_J$	60		

# SB2150&SB2200

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

Fig. 1 - Forward Current Derating Curve

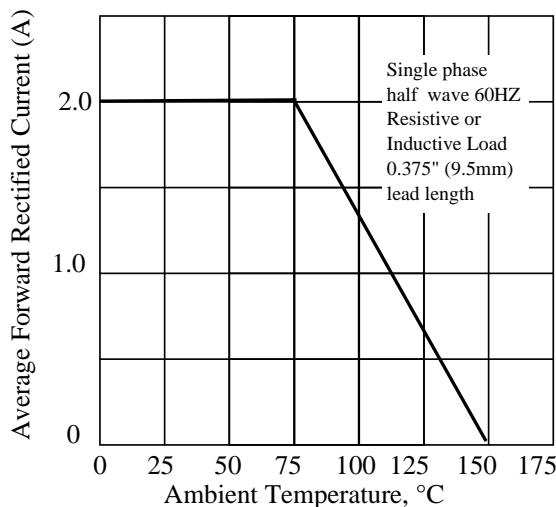


Fig 3. - Typical Instantaneous Forward Characteristics

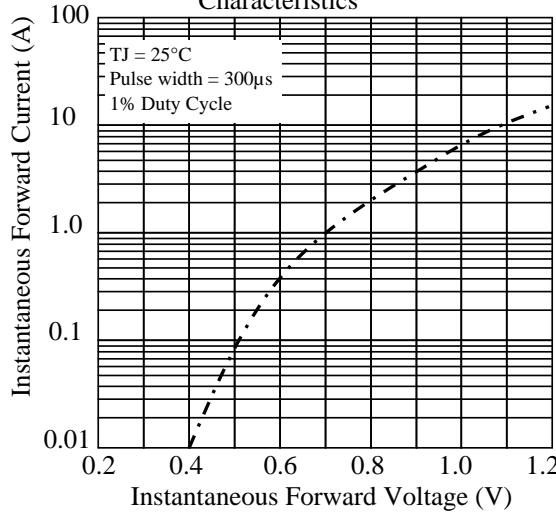


Fig 5. - typical transient thermal impedance

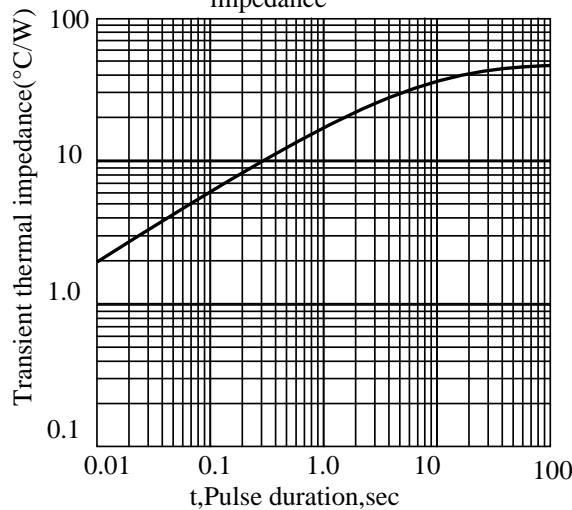


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

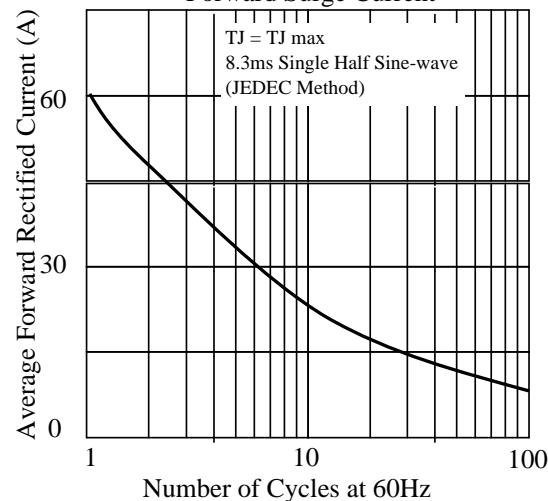


Fig 4. - Typical Reverse Characteristics

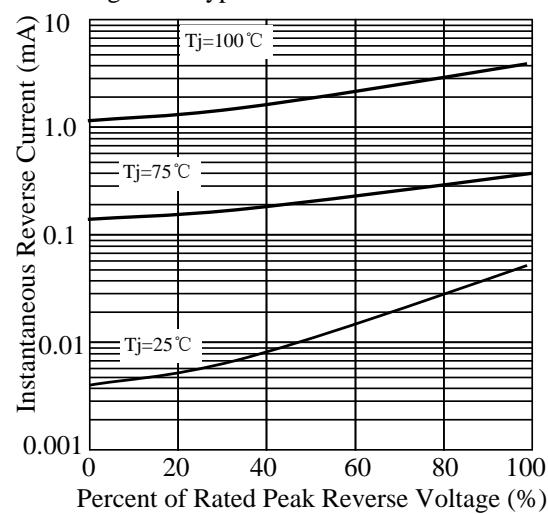
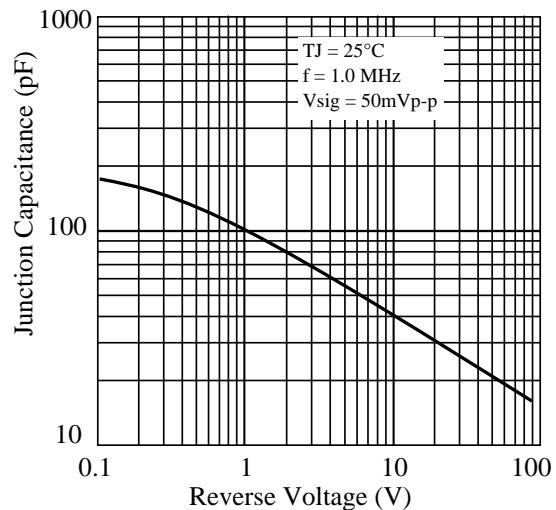


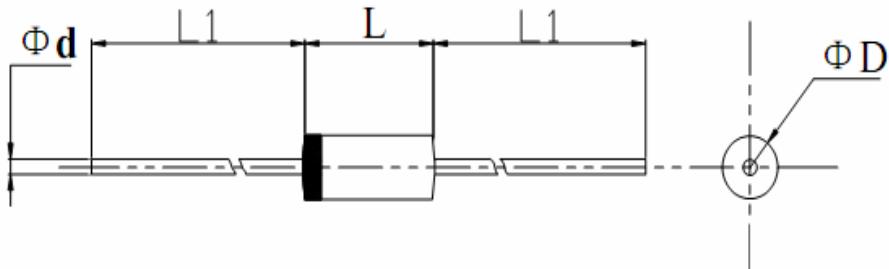
Fig 6. - Typical Junction Capacitance



## SB2150&SB2200

### 3. dimension:

Package outline



Dimensions					Note: DO-15 molded plastic case The marking band indicates the cathode
	inches		mm		
	Min.	Max.	Min.	Max.	
$L$	0.230	0.300	5.8	7.6	
$L1$	1.0	-	25.4	-	
$\Phi D$	0.104	0.140	2.6	3.6	
$\Phi d$	0.028	0.034	0.7	0.9	



乐山无线电股份有限公司  
Leshan Radio Company, Ltd

## SB2150&SB2200

### 4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	周杰	2011-7-18
2	修正外形和电流	周杰	2013-3-27