

**SINLOON®**

肖特基二極管

Case: TO-263

**SB820D - SB8100D**

**8.0A Surface Mount Dual Schottky Barrier Rectifier**

**Feature**

- ◆ Schottky Barrier Chip
- ◆ Guard Ring Die Construction For Transient Protection
- ◆ Low Forward Voltage Drop
- ◆ Low Power Loss, High Efficiency
- ◆ High Surge Current Capability
- ◆ For Use in Low Voltage, High Frequency Inverters, Free Wheeling and Polarity Protection Applications.

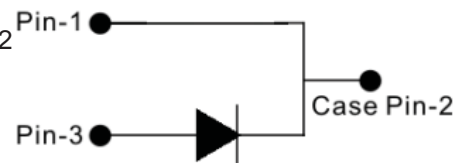
Figure



**Mechanical Data**

- ◆ Case: D<sup>2</sup>PAK/TO-263, Molded Plastic
- ◆ Terminals: Plated Leads Solderable per MIL-STD-202, Method 2
- ◆ Polarity: See Diagram
- ◆ Weight: 1.7 grams (approx)
- ◆ Mounting Position: Any
- ◆ Marking: Type Number
- ◆ Lead Free: For RoHS / Lead Free Version Add "-LF" Suffix to part Number.

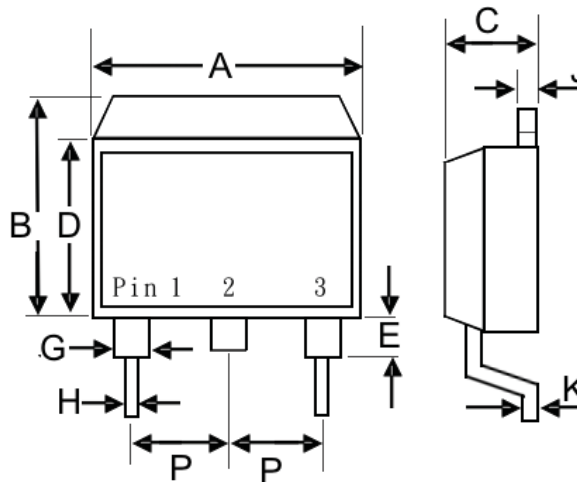
**Electrical Symbol**



**Dimension**

Case: D<sup>2</sup>PAK/TO-263 (mm)

Dim.	Min.	Max.
A	9.8	10.4
B	9.6	10.6
C	4.4	4.8
D	8.5	9.1
E	2.8	---
G	1.0	1.4
H	---	0.9
J	1.2	1.4
K	0.3	0.7
P	2.35	2.75

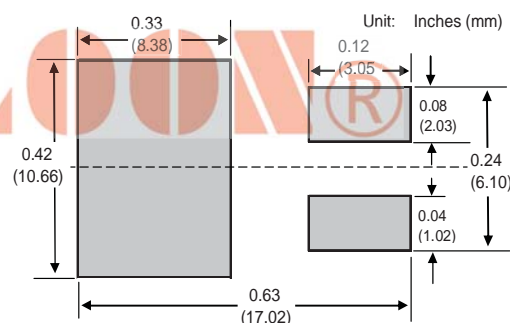


**Marking Information**

- SB8xxD = Device Number
- xx = See Page 2 SB Part
- Polarity = As Marked Body



**Recommended Footprint**



**Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$  unless otherwise specified**

Single Phase, half wave, 60Hz, resistive or inductive load For capacitive load, derate current by 20%.

Characteristics	Symbol	SB 820D	SB 830D	SB 840D	SB 845D	SB 850D	SB 860D	SB 880D	SB 8100D	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$									
Working Peak Reverse Voltage	$V_{RWM}$	20	30	40	45	50	60	80	100	V
DC Blocking Voltage	$V_R$									
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	32	35	42	56	70	V
Average Rectified Output Current @ $T_C=130^\circ\text{C}$	$I_O$	8.0			8.0			8.0		A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC)	$I_{FSM}$	150			150			150		A
Forward Voltage @ $I_F=8.0\text{A}$	$V_{FM}$	0.55			0.75			0.85		V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$	$I_{RM}$	0.5								mA
At Rated DC Blocking Vol. @ $T_A=100^\circ\text{C}$		50								
Typical Junction Capacitance (Note 1)	$C_j$	350								pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	3.0								$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_i, T_{STG}$	-65 to +150								$^\circ\text{C}$

Note 1: Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Note 2: Mounted on minimum recommended pad size on FR-4 board.

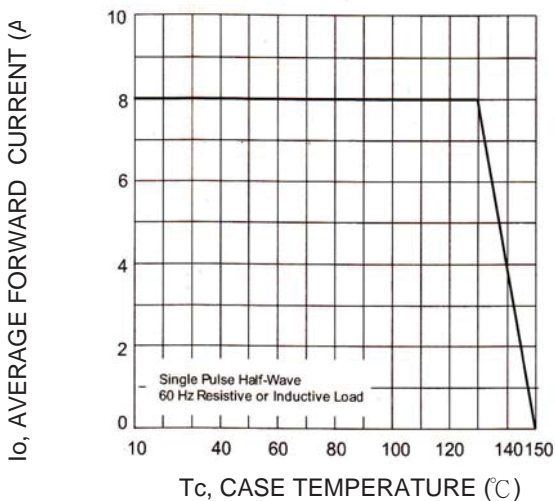


Fig-1 Forward and Current Derating Curve

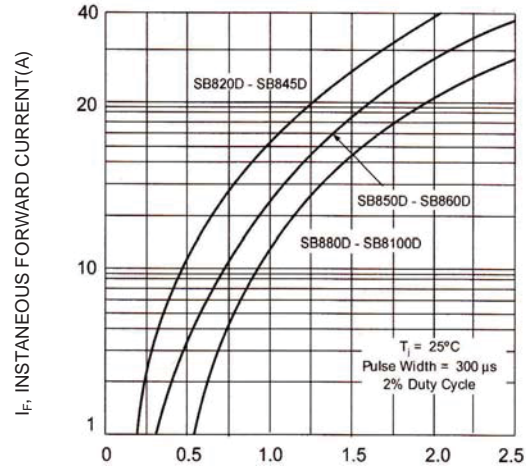


Fig-2 Typical Forward Characteristics

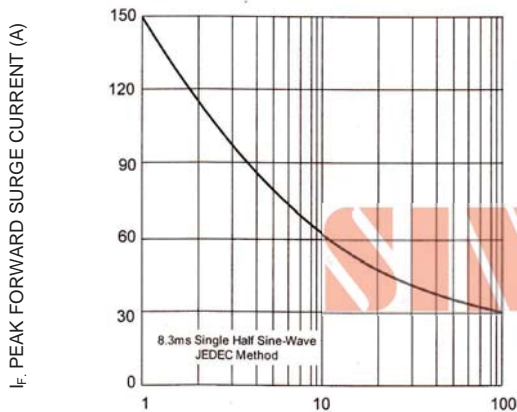


Fig-3 Maximum Non-Repetitive Peak FWD Surge Current

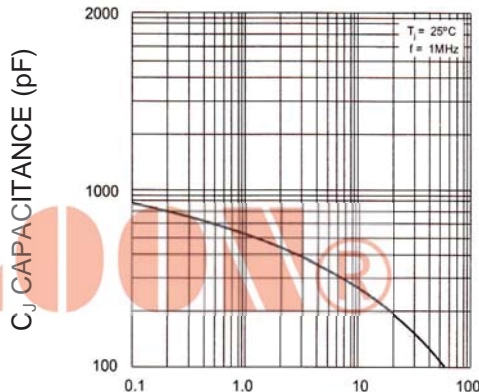


Fig-4 Typical Junction Capacitance

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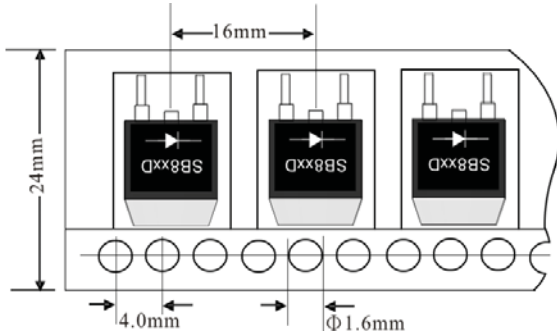
**8.0A Surface Mount Dual Schottky Barrier Rectifier**

**Packaging Information**

Reel Dimension (mm)	Quantity (Pcs)	Inner Box Size LxWxH (mm)	Quantity (Pcs)	Carton Size LxWxH (mm)	Quantity (Pcs)	Gross Weight
330	800	340x337x45	1600	370x370x420	6400	15Kg

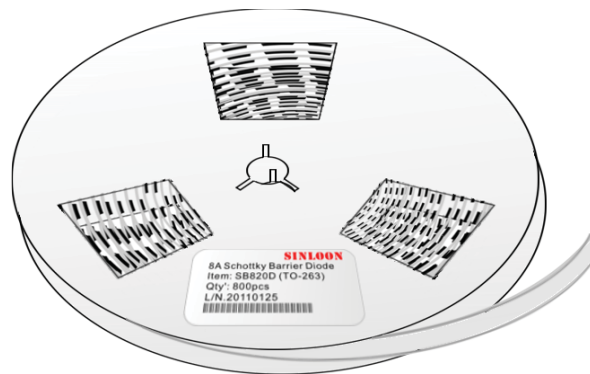
Note: 1. Paper reel. White or gray color,  
2. Components are packed in accordance with EIA standard 481-1 and 481-2

**Paper Tape**

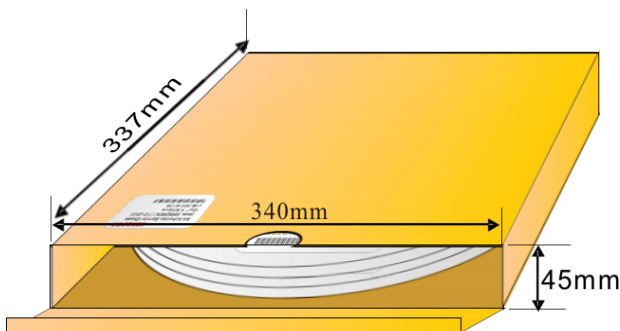


**Reel Package**

Size: 330 mm



**Inner Box**



**Cartons Package**



Carton Size: 370x370x420 mm

**SINLOON®**

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※Mayloon characteristic parameters of electronic product specification changes or updates without notice to improve。

