

SINLOON®

肖特基二極管

Case: TO-263

31620DC - SB16100DC (20V-100V)

16A 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.

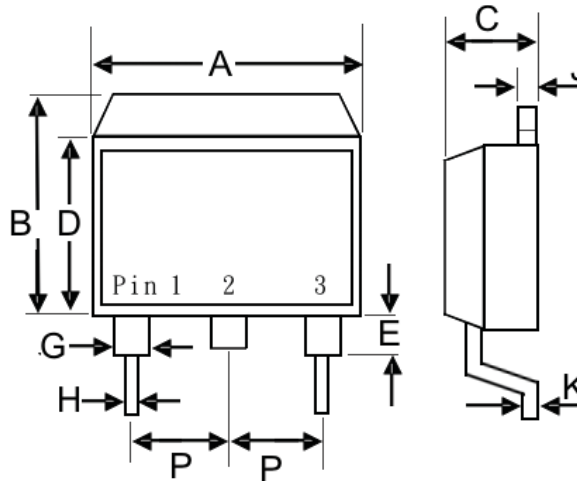
Mechanical Data

- ◆ Case: D²PAK/TO-263, Molded Plastic
- ◆ Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- ◆ 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.

Dimension

Case: D²PAK/TO-263 (mm)

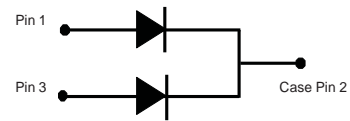
Dim.	Min.	Max.
A	9.8	10.4
B	9.6	10.6
C	4.4	4.8
D	8.5	9.1
E	2.8	---
G	1.0	1.4
H	---	0.9
J	1.2	1.4
K	0.3	0.7
P	2.35	2.75



Figure

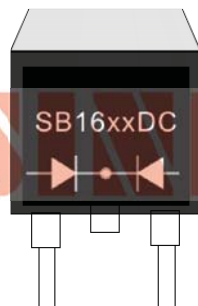


Electrical Symbol

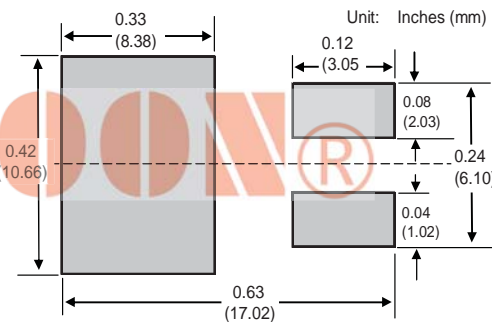


Marking Information

SB16xxDC = Device Number
xx = See Page 2 SB Part
Polarity = As Marked Body



Recommended Footprint



SINLOON®

肖特基二極管

SB1620DC - SB16100DC (20V-100V)

Case: TO-263 16A Surface Mount Dual Schottky Barrier Rectifier

□ 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	SB16								Unit
		20DC	30DC	40DC	45DC	50DC	60DC	80DC	100DC	
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 @ $T_c=105^\circ\text{C}$	I_O	16.0			16.0			16.0		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	400								pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0								$^\circ\text{C/W}$
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.

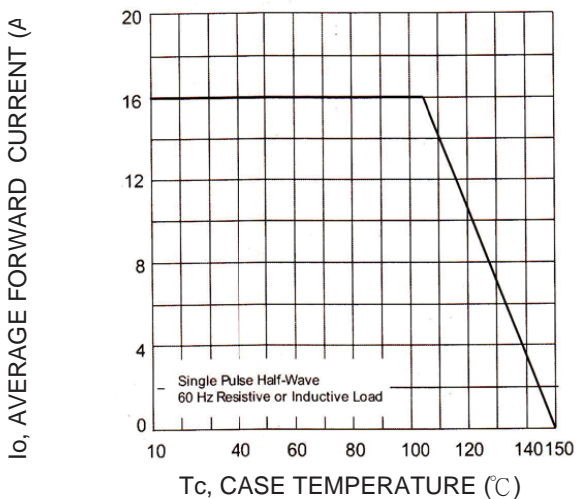


Fig-1 Forward and Current Derating Curve

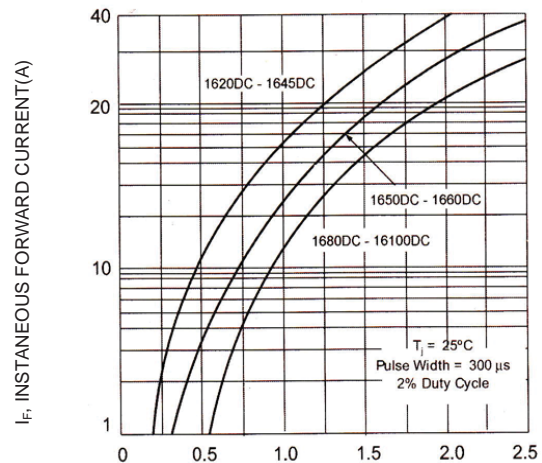


Fig-2 Typical Forward Characteristics

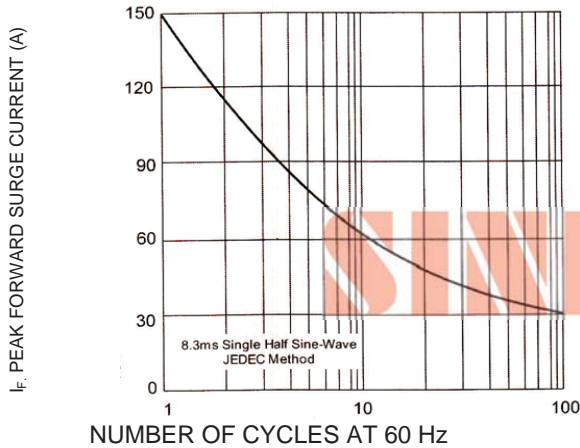


Fig-3 Maximum Non-Repetitive Peak FWD Surge Current

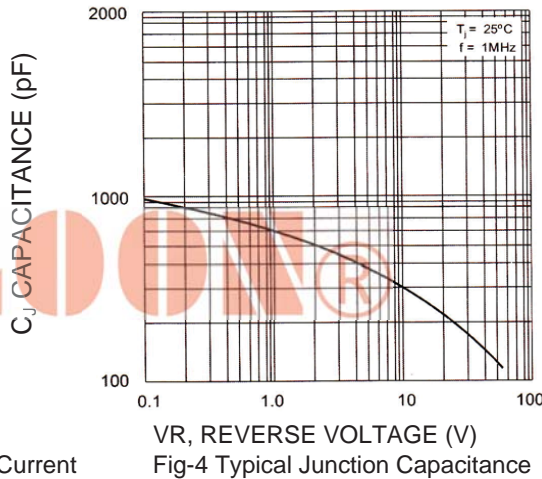


Fig-4 Typical Junction Capacitance



SINLOON®

肖特基二極管

31620DC - SB16100DC (20V-100V)

Case: TO-263

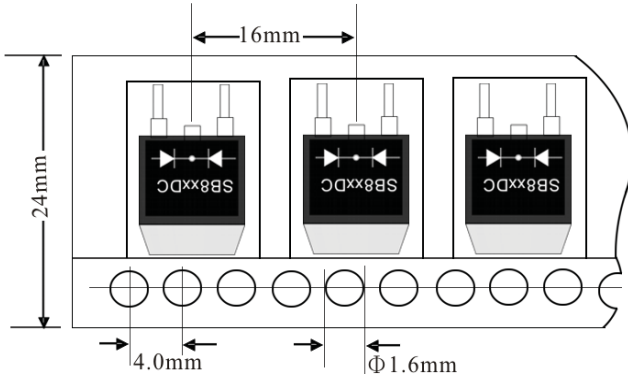
16A Surface Mount Dual Schottky Barrier Rectifier

□ 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

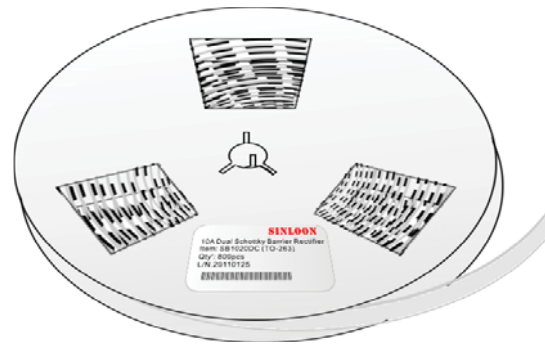
Note: 1. Paper reel. White or gray color,
2. Components are packed in accordance with EIA standard 481-1 and 481-2

Paper Tape



Reel Package

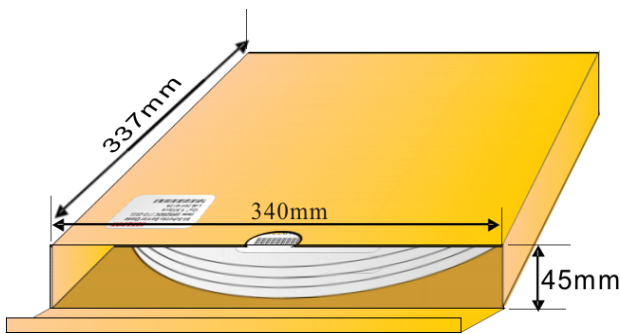
Q'ty. 800/Reel



D: 3300 mm

Inner Box

Q'ty: 1600/Box



Cartons Package

Q'ty. 6400/Ctn.



Carton Size: 370x370x420 mm

SINLOON®

※美隆公司產品規格及其特性參數的改變或更新恕不另行通知。

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

