

SINLOON®

肖特基二極管

Case: TO-263

SB1020DC - SB10100DC

10A Surface Mount Dual Schottky Barrier Rectifier

Feature

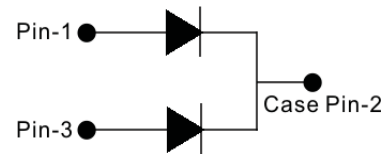
- ◆ Schottky Barrier Chip
- ◆ Guard Ring Die Construction For Transient Protection
- ◆ Low Forward Voltage Drop
- ◆ Low Power Loss, High Efficiency
- ◆ High Surge Current Capability
- ◆ For Use in Low Voltage, High Frequency Inverters, Free Wheeling and Polarity Protection Applications.

Figure



Mechanical Data

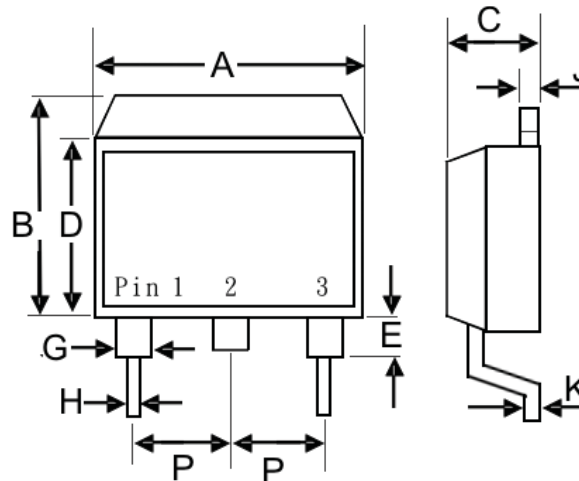
- ◆ Case: D²PAK/TO-263, Molded Plastic
- ◆ Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- ◆ Polarity: See Diagram
- ◆ Weight: 1.7 grams (approx)
- ◆ Mounting Position: Any
- ◆ Marking: Type Number
- ◆ Lead Free: For RoHS / Lead Free Version Add "-LF" Suffix to part Number.



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



Marking Information

- SB10xxCT = Device Number
- xx = See Page 2 SB Part
- Polarity = As Marked Body



SINLOON®

肖特基二極管

SB1020DC - SB10100DC

Case: TO-263

10A Surface I

10A Dual Schottky Barrier Rectifier

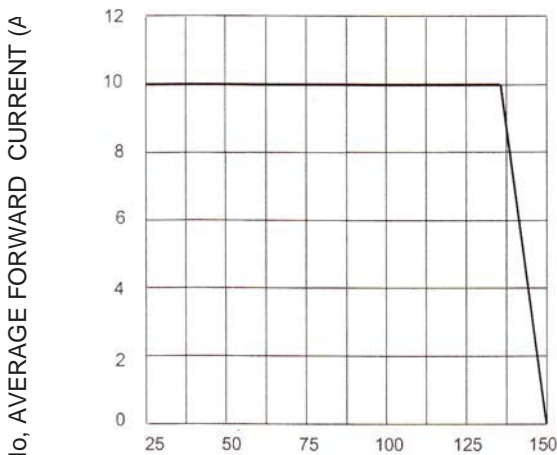
Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

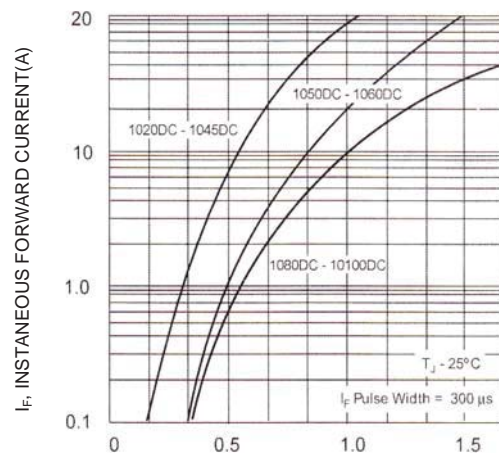
Characteristics	Symbol	SB	SB	SB	SB	SB	SB	SB	SB	Unit
		1020DC	1030DC	1040DC	1045DC	1050DC	1060DC	1080DC	10100DC	
Peak Repetitive Reverse Voltage	V_{RRM}									
Working Peak Reverse Voltage	V_{RWM}	20	30	40	45	50	60	80	100	V
DC Blocking Voltage	V_R									
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	32	35	42	56	70	V
Average Rectified Output Current @ $T_C=135^\circ\text{C}$	I_O	10	10	10	10	10	10	10	10	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC)	I_{FSM}	150	150	150	150	150	150	150	150	A
Forward Voltage @ $I_F=5.0\text{A}$	V_{FM}	0.55	0.55	0.55	0.55	0.75	0.75	0.85	0.85	V
Peak Reverse Current @ $T_A=25^\circ\text{C}$	I_{RM}	1								mA
At Rated DC Blocking Vol. @ $T_A=100^\circ\text{C}$		50								
Typical Junction Capacitance (Note 1)	C_j	550								pF
Typical Thermal Resistance (Note 2)	$T_{\theta JC}$	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.

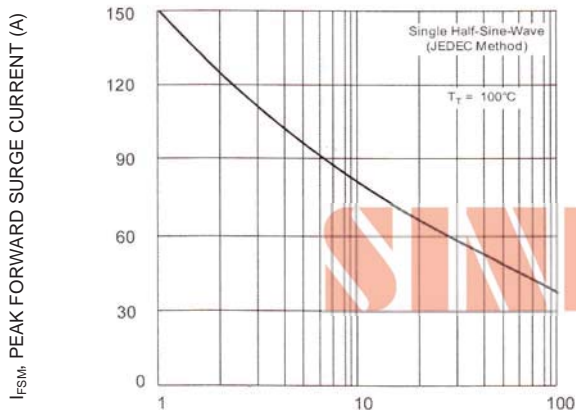
Note 2: Mounted on minimum recommended pad size on FR-4 board.



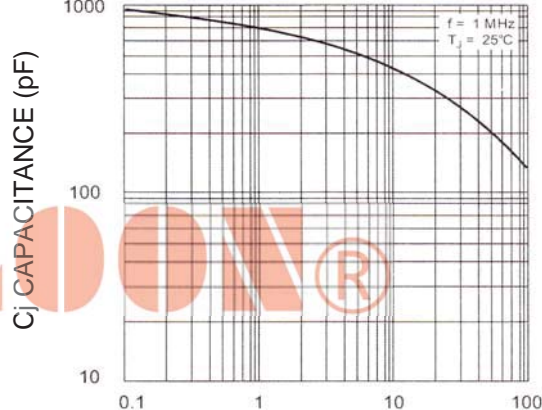
T_C , CASE TEMPERATURE ($^\circ\text{C}$)
Fig-1 Forward and Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig-2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz
Fig-3 Maximum Non-Repetitive Peak FWD Surge Current



V_R , REVERSE VOLTAGE (V)
Fig-4 Typical Junction Capacitance



SINLOON®

肖特基二極管

SB1020DC - SB10100DC

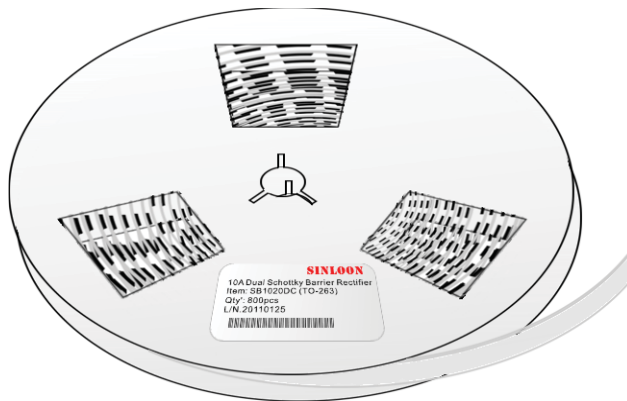
Case: TO-263

10A 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	800	370x370x420	6400	15Kg

Reel Pack



Cartons Package



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。

