

SB5200

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 200 V

Forward Current - 5 A

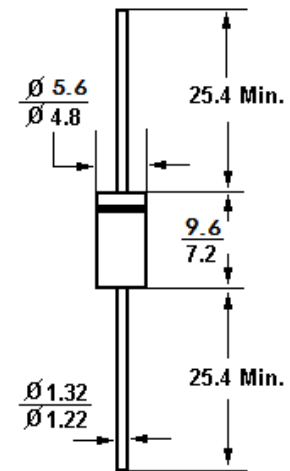
DO-201AD

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Guard ring for overvoltage protection
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Mechanical Data

- **Case:** Molded plastic body, JEDEC DO-201AD.
- **Terminals:** Axial leads, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end.
- **Mounting Position:** Any



Dimensions in mm

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbols	SB5200	Unit
	Marking	SB5200	-
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS Voltage	V_{RMS}	140	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5	A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	120	A
Maximum Instantaneous Forward Voltage at 3 A	V_F	0.85	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1 1	mA
Typical Junction Capacitance ¹⁾	C_j	120	pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	10	°C/W
Typical Thermal Resistance ²⁾	$R_{\theta JC}$	2	°C/W
Operating Junction Temperature Range	T_j	- 55 to + 150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

¹⁾ Measured at 1MHz and applied reverse voltage of 4 V D.C.

²⁾ Thermal Resistance from Junction to lead vertical P.C.B, mounted with 0.375"(9.5mm) lead length

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