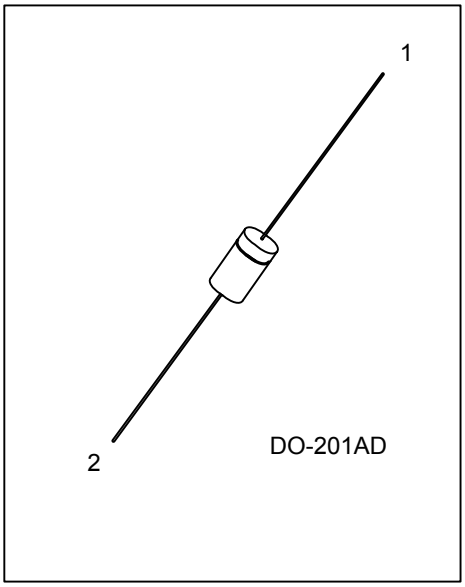
# SCHOTTKY BARRIER RECTIFIER




## ■ DESCRIPTION

The UTC **SB5200** is a schottky barrier rectifier, it uses UTC's advanced technology to provide customers with high current capability and low forward voltage drop, etc.

The UTC **SB5200** is suitable for free wheeling, low voltage, high frequency inverters and polarity protection applications.

## ■ FEATURES

* Low forward voltage drop
* High current capability

## ■ ORDERING INFORMATION

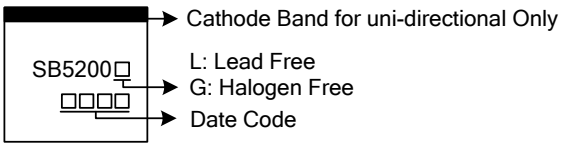
| Ordering Number | | Package | Pin Assignment | | Packing |
|---|---|---|---|---|---|
| Lead Free | Halogen Free | | 1 | 2 | |
| SB5200L-Z21D-R | SB5200G-Z21D-R | DO-201AD | K | A | Tape Reel |

Note: Pin Assignment: A: Anode, K: Cathode

SB5200L-Z21D-R
(1)Packing Type
(2)Package Type
(3)Lead Free

(1) R: Tape Reel
(2) Z21D: DO-201AD
(3) L: Lead Free, G: Halogen Free

## ■ MARKING





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## ■ ABSOLUTE MAXIMUM RATINGS

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

| PARAMETER | SYMBOL | RATINGS | UNIT |
|---|---|---|---|
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | 200 | V |
| RMS Voltage | $V_{RMS}$ | 140 | V |
| DC Blocking Voltage | $V_{DC}$ | 200 | V |
| Average Forward Rectified Current | $I_F$ | 5.0 | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load | $I_{FSM}$ | 100.0 | A |
| Junction Temperature | $T_J$ | -55~+150 | °C |
| Storage Temperature | $T_{STG}$ | -55~+150 | °C |

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

## ■ THERMAL DATA

| PARAMETER | SYMBOL | RATINGS | UNIT |
|---|---|---|---|
| Junction to Ambient | $\theta_{JA}$ | 50 | °C/W |
| Junction to Case | $\theta_{JC}$ | 12 | °C/W |

## ■ ELECTRICAL CHARACTERISTICS

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

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|---|
| Instantaneous Forward Voltage | $V_F$ | $I_F$=5A, $T_A$=25°C | | | 0.9 | V |
| | | $I_F$=5A, $T_A$=100°C | | | 0.8 | V |
| DC Reverse Current at Rated DC Blocking Voltage | $I_R$ | $T_A$=25°C | | | 0.2 | mA |
| | | $T_A$=100°C | | | 5.0 | mA |
| Junction Capacitance | $C_J$ | | | | 110 | pF |

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