

## CHOTTKY BARRIER RECTIFIER

**DO-201AD**

**SR5200**



Cathode → Anode

### Features

- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

### Applications

- DC/DC Converters
- AC/DC Adaptors
- Switching Power Supplies
- Freewheeling Diodes

### Maximum ratings and electrical characteristics ( $T_J = 25^\circ\text{C}$ unless otherwise noted)

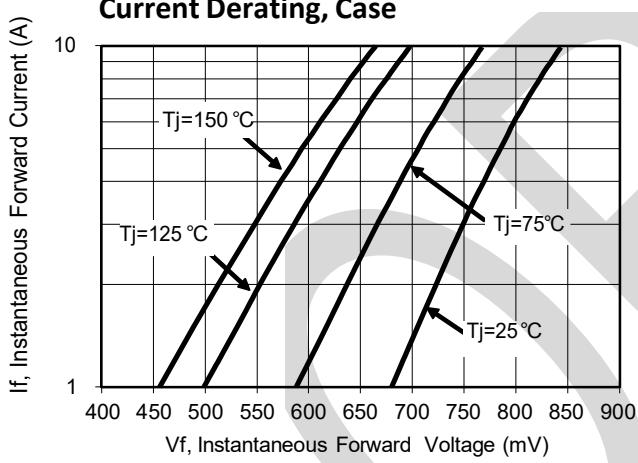
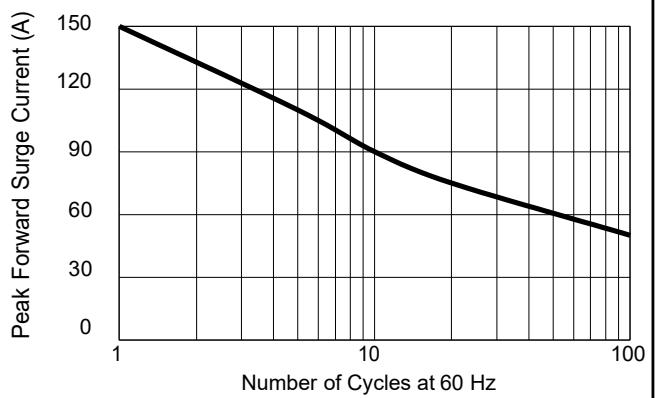
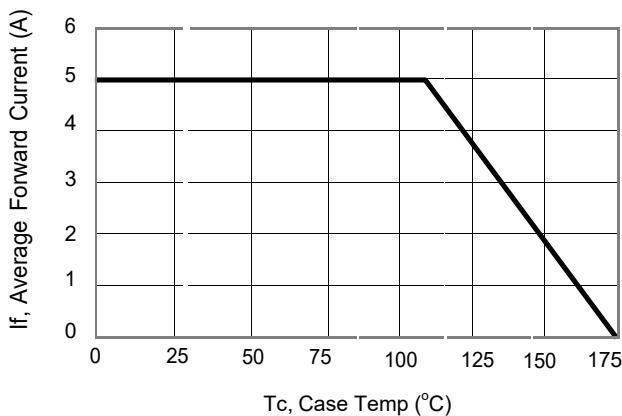
| Parameter  | Symbol       | Limit         |       | Unit |  |
|--|--------------|---------------|-------|------|--|
| Maximum repetitive peak reverse voltage  | VRRM         | 200           |       | V    |  |
| Maximum average forward rectified current  | IF(AV)       | 5             |       | A    |  |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode | IFSM         | 150           |       | A    |  |
| Operating junction and storage temperature range   | $T_J$ , TSTG | -50 to +175   |       | °C   |  |
| Typical thermal resistance per leg   | DO-201AD     | R $\theta$ JC | 22    | °C/W |  |
| Instantaneous forward voltage per diode  | IF=3A        | TJ=25°C       | VF(1) | TYP. |  |
|  | IF=3A        | TJ=125°C      |       | MAX. |  |
|  | IF=5A        | TJ=25°C       |       | 0.76 |  |
|  | IF=5A        | TJ=125°C      |       | 0.68 |  |
|  |              |               |       | 0.85 |  |
| Instantaneous reverse current per diode at rated reverse voltage                             | TJ=25°C      |               | IR(2) | 0.95 |  |
|  | TJ=125°C     |               |       | 0.80 |  |
|  |              |               |       | -    |  |
|  | TJ=25°C      |               | IR(2) | 10   |  |
|  | TJ=125°C     |               |       | 200  |  |
|  |              |               |       | uA   |  |
|  |              |               |       | 10   |  |
|  |              |               |       | -    |  |
|  |              |               |       | mA   |  |

Notes:

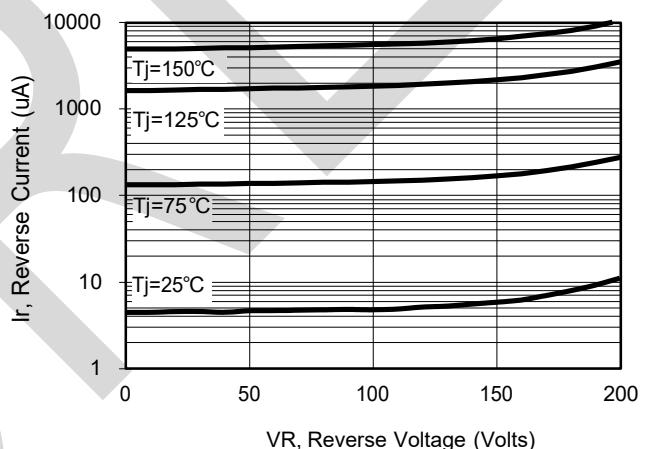
(1) Pulse test: 300  $\mu\text{s}$  pulse width, 1 % duty cycle

(2) Pulse test: Pulse width  $\leq 40$  ms

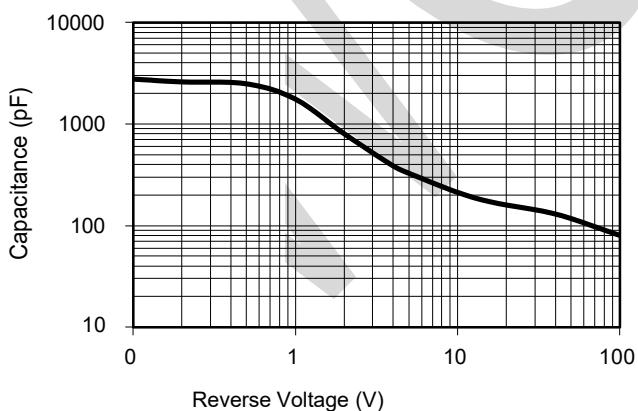
## RATINGS AND CHARACTERISTICS CURVES



## Maximum Repetitive Surge Current



## Typical Forward Voltage

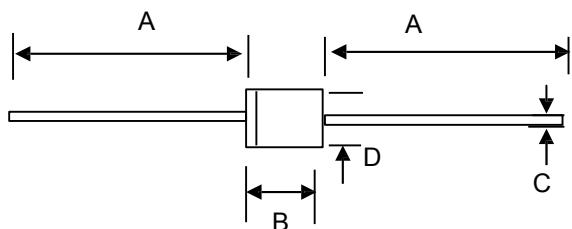


## Typical Reverse Current

## Typical Junction Capacitance

## PACKAGE OUTLINE DIMENSIONS

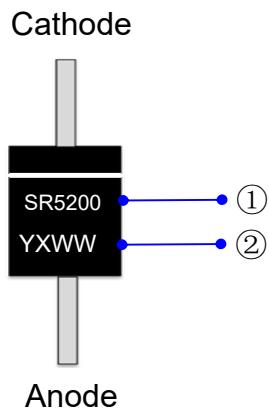
### DO-201AD



DO-201AD mechanical data

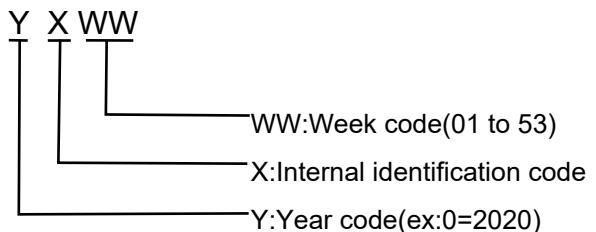
| UNIT |     | A       | B      | C     | D      |
|------|-----|---------|--------|-------|--------|
| mm   | max | 26.5    | 9.5    | 1.4   | 5.3    |
|      | min | 24.5    | 7.3    | 1.1   | 4.8    |
| mil  | max | 1043.30 | 374.01 | 55.12 | 208.67 |
|      | min | 946.57  | 287.40 | 39.37 | 188.97 |

## Marking Information



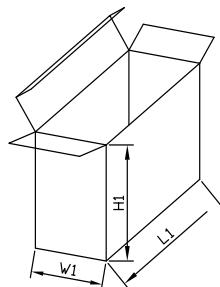
①Product model : SR5200

②PDC information:

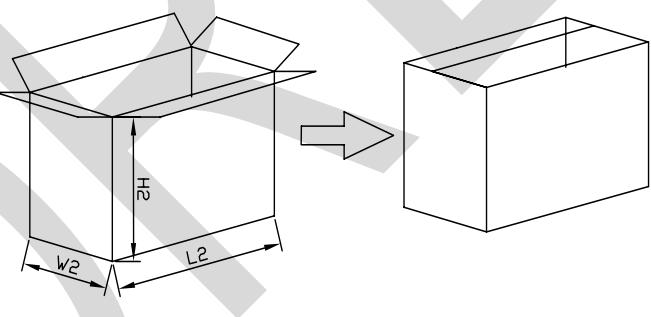


## Packaging Information

1.Inside Box



2.Outside Box



## Packaging Information

| NO   | UNIT      | Inside Box                                 |    |     | Outside Box                               |     |     |
|------|-----------|--|----|-----|---|-----|-----|
|      |           | L1   | W1 | H1  | L2  | W2  | H2  |
| Size | mm        | 255  | 75 | 145 | 415                                       | 280 | 320 |
|      |           |  |    |     |   |     |     |
| QTY  | PCS       | Smallest package,1000PCS/carton            |    |     | 10,000PCS/carton,10 boxes in total        |     |     |
| Note | Tolerance | $\leq 20\text{mm}, \pm 3\text{mm};$        |    |     | $21\text{-}100\text{mm}, \pm 5\text{mm};$ |     |     |
|      |           | $101\text{-}500\text{mm}, \pm 10\text{mm}$ |    |     |   |     |     |