

# SANYO Semiconductors

DATA SHEET

## SBT250-10R — Schottky Barrier Diode (Twin Type · Cathode Common) 100V, 25A Rectifier

## Applications

• High frequency rectification (switching regulators, converters, choppers).

### Features

- Guaranteed up to  $Tj=150^{\circ}C$ .
- Low forward voltage (VF max=0.80V).
- Fast reverse recovery time.
- Low switching noise.
- High reliability due to highly reliable planar structure.
- · Micaless package facilitating easy mounting.

## **Specifications**

#### Absolute Maximum Ratings at Ta=25°C

| Parameter                                | Symbol | Conditions                             | Ratings     | Unit |
|--|--------|--|-------------|------|
| Repetitive Peak Reverse Voltage          | VRRM   |  | 100         | V    |
| Nonrepetitive Peak Reverse Surge Voltage | VRSM   |  | 105         | V    |
| Average Output Current                   | IO     | 50Hz resistive load, Sine wave Tc=63°C | 25          | Α    |
| Surge Forward Current                    | IFSM   | 50Hz sine wave, 1 cycle                | 100         | A    |
| Junction Temperature                     | Tj     |  | -55 to +150 | °C   |
| Storage Temperature                      | Tstg   |  | -55 to +150 | °C   |

#### Electrical Characteristics at Ta=25°C

| Parameter                 | Symbol   | Conditions                    | Ratings |     |      | Unit   |
|---------------------------|----------|-------------------------------|---------|-----|------|--------|
|                           |          |                               | min     | typ | max  | Offic  |
| Reverse Voltage           | VR       | IR=3mA, Tj=25°C*              | 100     |     |      | V      |
| Forward Voltage           | VF       | IF=9.5A, Tj=25°C*             |         |     | 0.80 | V      |
| Reverse Current           | IR       | VR=50V, Tj=25°C*              |         |     | 0.3  | mA     |
| Interterminal Capacitance | С        | V <sub>R</sub> =10V, Tj=25°C* |         | 280 |      | pF     |
| Thermal Resistance        | Rth(j-c) | Junction-Case : Smoothed DC   |         |     | 2.4  | °C / W |

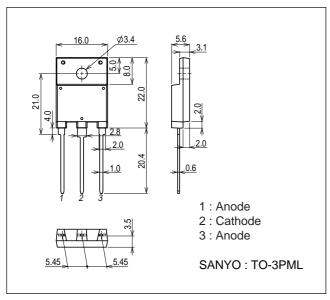
Note) \* : Value per element

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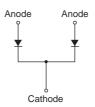
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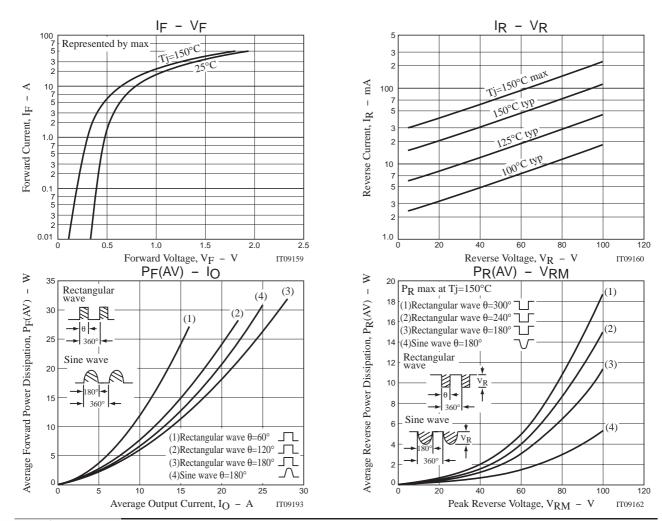
#### Package Dimensions

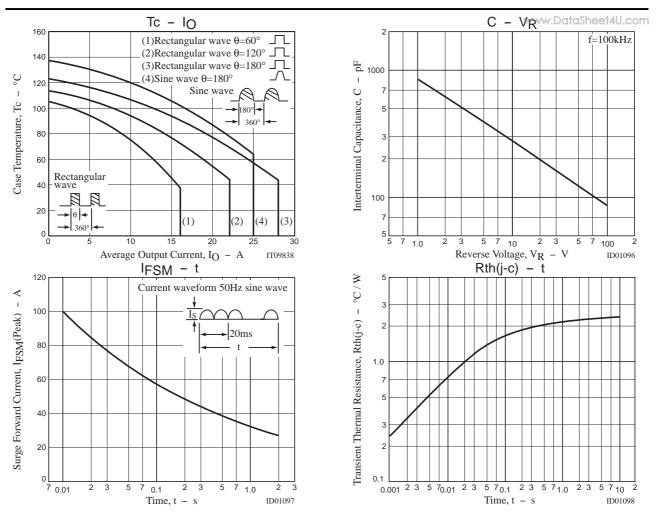
unit : mm 7505-001



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