


**SANYO Semiconductors**

# DATA SHEET

## SBT80-10LS — Schottky Barrier Diode (Twin Type · Cathode Common) 100V, 8A Rectifier

### Applications

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

### Features

- $T_j=150^{\circ}\text{C}$ .
- Low forward voltage ( $V_F \text{ max}=0.80\text{V}$ ).
- Short reverse recovery time.
- Low switching noise.
- High reliability due to highly reliable planar structure.
- Micaless package facilitating mounting.

### Specifications

**Absolute Maximum Ratings** at  $T_a=25^{\circ}\text{C}$ 

| Parameter                                | Symbol    | Conditions                                              | Ratings         | Unit               |
|------------------------------------------|-----------|---------------------------------------------------------|-----------------|--------------------|
| Repetitive Peak Reverse Voltage          | $V_{RRM}$ |                                                         | 100             | V                  |
| Nonrepetitive Peak Reverse Surge Voltage | $V_{RSM}$ |                                                         | 105             | V                  |
| Average Output Current                   | $I_O$     | 50Hz resistive load, Sine wave $T_c=81^{\circ}\text{C}$ | 8               | A                  |
| Surge Forward Current                    | $I_{FSM}$ | 50Hz sine wave, 1 cycle                                 | 60              | A                  |
| Junction Temperature                     | $T_j$     |                                                         | $-55$ to $+150$ | $^{\circ}\text{C}$ |
| Storage Temperature                      | $T_{stg}$ |                                                         | $-55$ to $+150$ | $^{\circ}\text{C}$ |

**Electrical Characteristics** at  $T_a=25^{\circ}\text{C}$ 

| Parameter                 | Symbol        | Conditions                                     | Ratings |     |      | Unit                          |
|---------------------------|---------------|------------------------------------------------|---------|-----|------|-------------------------------|
|                           |               |                                                | min     | typ | max  |                               |
| Reverse Voltage           | $V_R$         | $I_R=1\text{mA}$ , $T_j=25^{\circ}\text{C}^*$  | 100     |     |      | V                             |
| Forward Voltage           | $V_F$         | $I_F=3.0\text{A}$ , $T_j=25^{\circ}\text{C}^*$ |         |     | 0.80 | V                             |
| Reverse Current           | $I_R$         | $V_R=50\text{V}$ , $T_j=25^{\circ}\text{C}^*$  |         |     | 0.1  | mA                            |
| Interterminal Capacitance | C             | $V_R=10\text{V}$ , $T_j=25^{\circ}\text{C}^*$  |         | 90  |      | pF                            |
| Thermal Resistance        | $R_{th(j-c)}$ | Junction-Case : Smoothed DC                    |         |     | 5.0  | $^{\circ}\text{C} / \text{W}$ |

(Note) \* : Value per element

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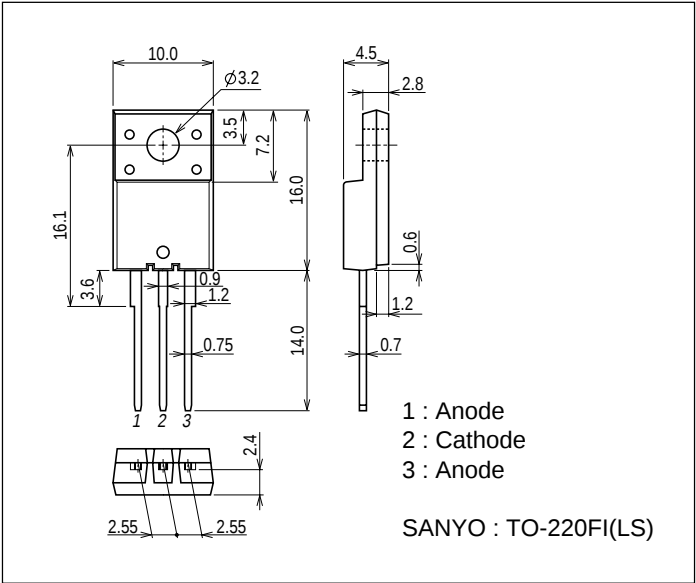
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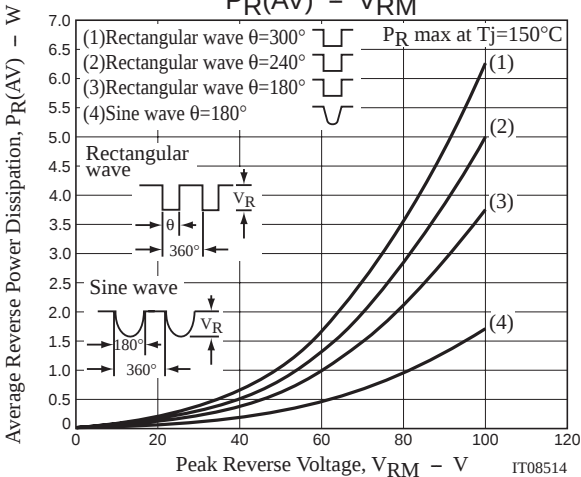
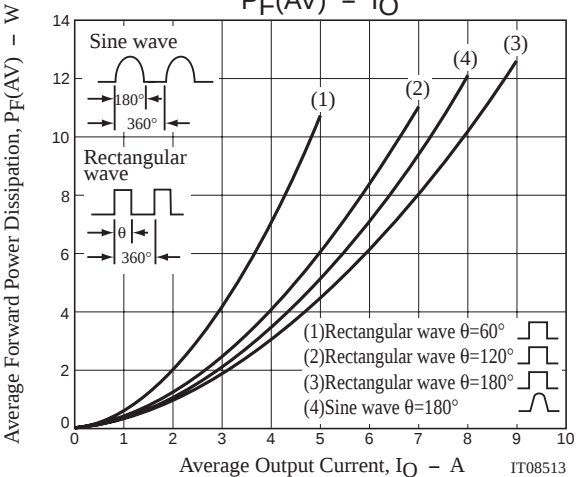
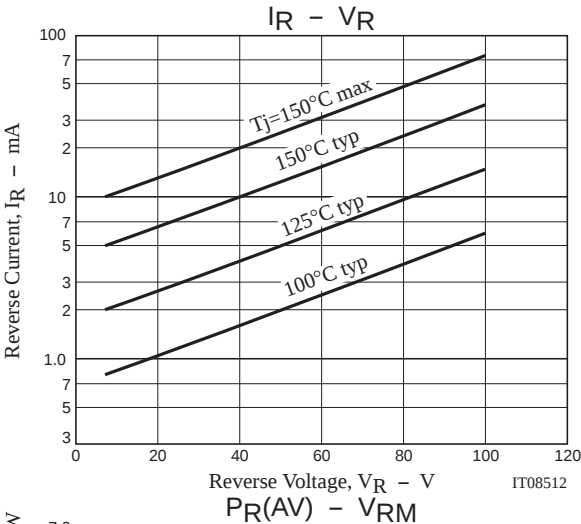
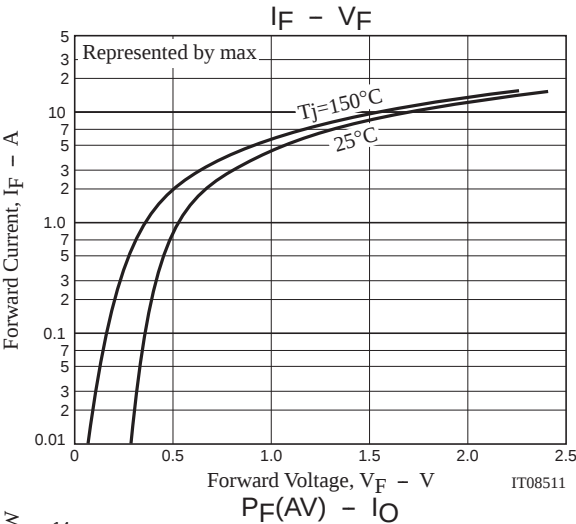
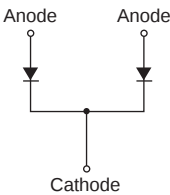
Package Dimensions

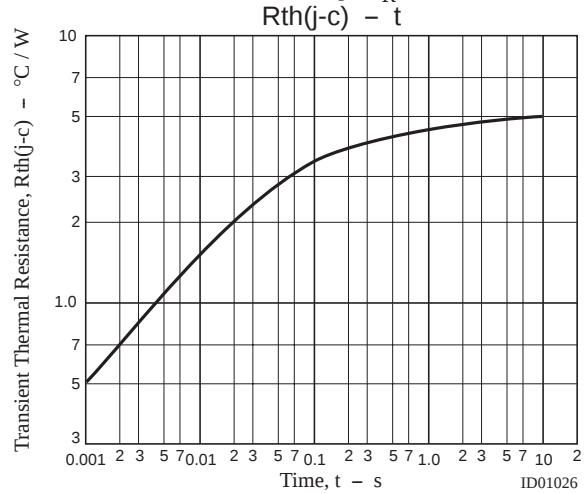
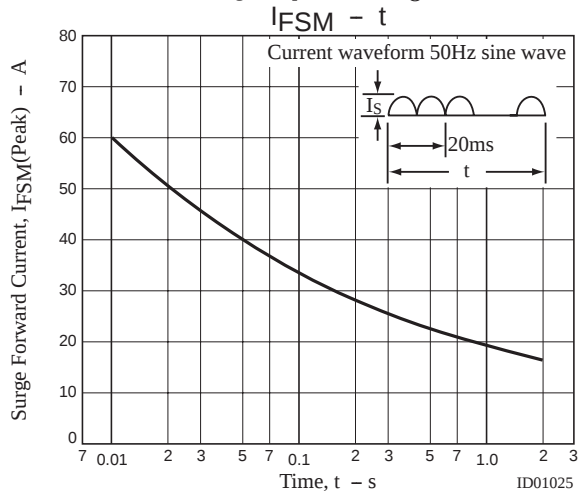
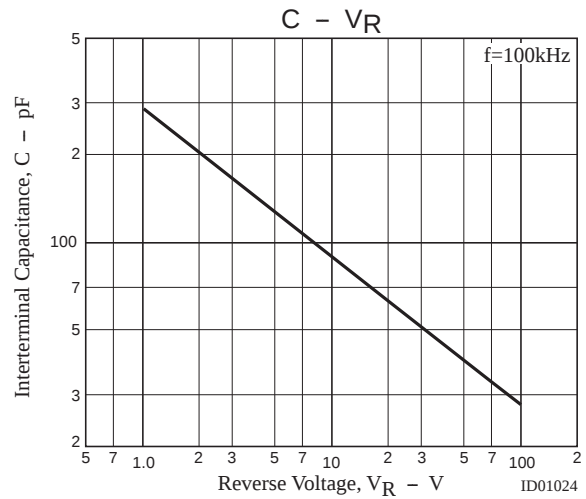
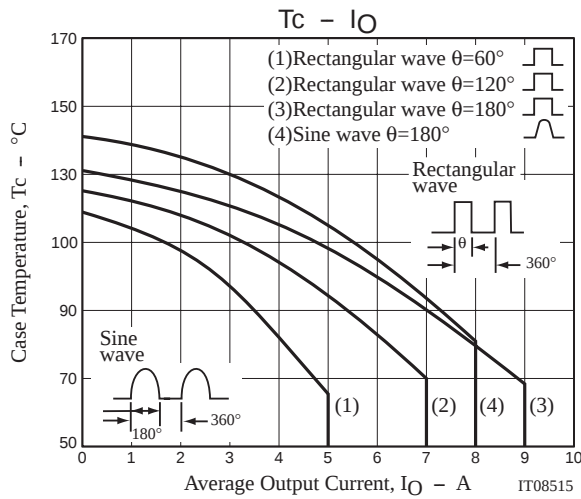
unit : mm

7509-001



Electrical Connection





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