

## SANYO Semiconductors DATA SHEET

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

### **Applications**

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

#### **Features**

- Tj=150°C.
- Low forward voltage (VF max=0.80V).
- · Short reverse recovery time.
- · Low switching noise.
- · High reliability due to highly reliable planar structure.
- · Micaless package facilitating 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                   | lo     | 50Hz resistive load, Sine wave Tc=81°C | 8           | Α    |
| Surge Forward Current                    | IFSM   | 50Hz sine wave, 1 cycle                | 60          | Α    |
| Junction Temperature                     | Tj     |  | -55 to +150 | °C   |
| Storage Temperature                      | Tstg   |  | -55 to +150 | °C   |

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

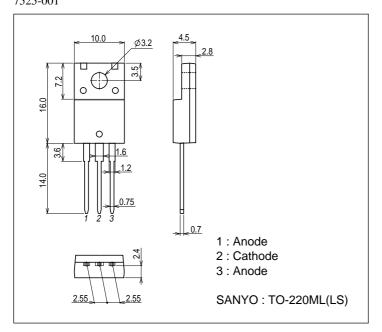
| Parameter                 | Symbol   | Conditions                    | Ratings |     |      | Unit  |
|---------------------------|----------|-------------------------------|---------|-----|------|-------|
|                           |          |                               | min     | typ | max  | Offic |
| Reverse Voltage           | ٧R       | I <sub>R</sub> =1mA, Tj=25°C* | 100     |     |      | V     |
| Forward Voltage           | VF       | IF=3.0A, Tj=25°C*             |         |     | 0.80 | V     |
| Reverse Current           | IR       | V <sub>R</sub> =50V, Tj=25°C* |         |     | 0.1  | mA    |
| Interterminal Capacitance | С        | V <sub>R</sub> =10V, Tj=25°C* |         | 90  |      | pF    |
| Thermal Resistance        | Rth(j-c) | Junction-Case : Smoothed DC   |         |     | 5.0  | °C/W  |

Note) \* : Value per element

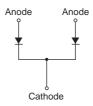
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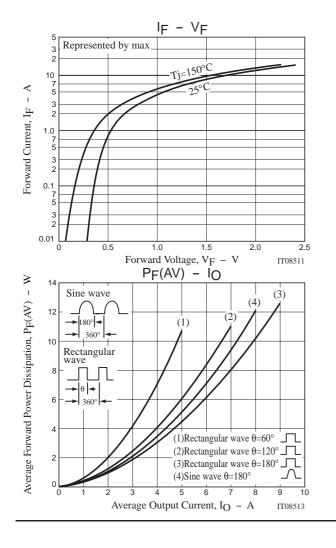
#### **Package Dimensions**

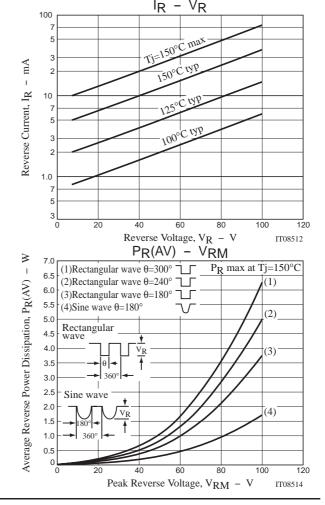
unit : mm (typ) 7525-001



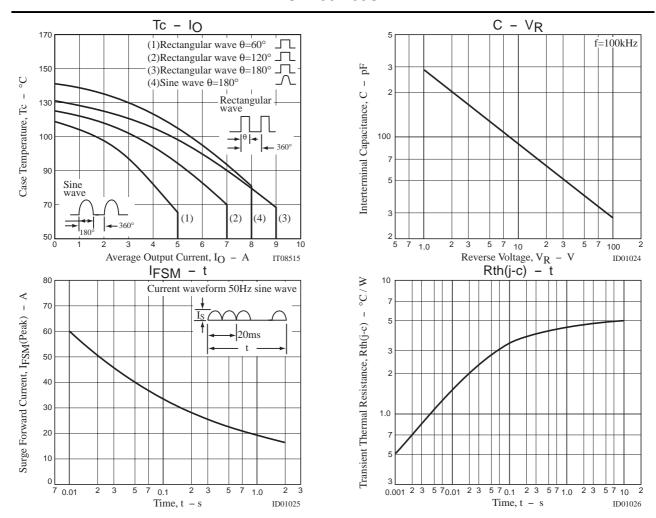
#### **Electrical Connection**







#### **SBT80-10JS**



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