



**THE DATASHEET OF  
SBT350-06J**





# SBT350-06J

 — Schottky Barrier Diode (Twin Type · Cathode Common)  

## 60V, 35A Rectifier

### Applications

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

### Features

- $T_j=150^{\circ}\text{C}$ .
- Low forward voltage ( $V_F \text{ max}=0.60\text{V}$ ).
- 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 $T_a=25^{\circ}\text{C}$

| Parameter                                | Symbol    | Conditions  | Ratings     | Unit               |
|--|-----------|---|-------------|--------------------|
| Repetitive Peak Reverse Voltage          | $V_{RRM}$ |   | 60          | V                  |
| Nonrepetitive Peak Reverse Surge Voltage | $V_{RSM}$ |   | 66          | V                  |
| Average Output Current                   | $I_O$     | 50Hz resistive load, Sine wave $T_c=51^{\circ}\text{C}$ | 35          | A                  |
| Surge Forward Current                    | $I_{FSM}$ | 50Hz sine wave, 1 cycle                                 | 140         | A                  |
| Junction Temperature                     | $T_j$     |   | -55 to +150 | $^{\circ}\text{C}$ |
| Storage Temperature                      | $T_{stg}$ |   | -55 to +150 | $^{\circ}\text{C}$ |

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

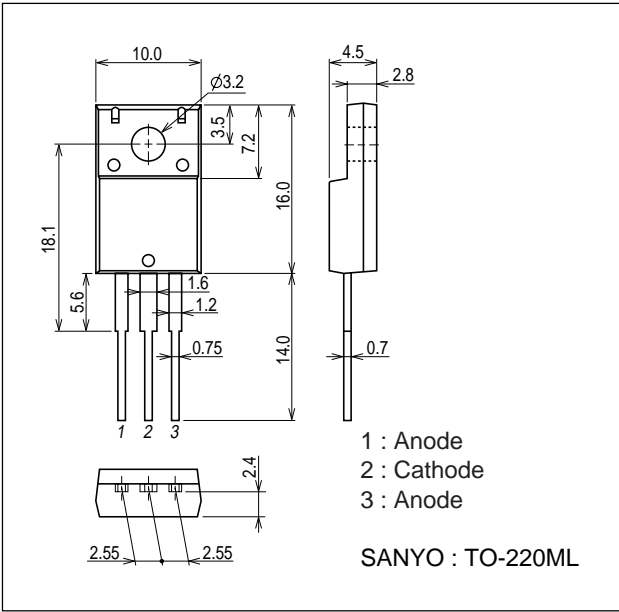
| Parameter                 | Symbol        | Conditions                                    | Ratings |     |      | Unit                        |
|---------------------------|---------------|---|---------|-----|------|-----------------------------|
|                           |               |   | min     | typ | max  |                             |
| Reverse Voltage           | $V_R$         | $I_R=5\text{mA}$ , $T_j=25^{\circ}\text{C}^*$ | 60      |     |      | V                           |
| Forward Voltage           | $V_F$         | $I_F=15\text{A}$ , $T_j=25^{\circ}\text{C}^*$ |         |     | 0.60 | V                           |
| Reverse Current           | $I_R$         | $V_R=30\text{V}$ , $T_j=25^{\circ}\text{C}^*$ |         |     | 0.5  | mA                          |
| Interterminal Capacitance | C             | $V_R=10\text{V}$ , $T_j=25^{\circ}\text{C}^*$ |         | 710 |      | pF                          |
| Thermal Resistance        | $R_{th(j-c)}$ | Junction-Case : Smoothed DC                   |         |     | 3.0  | $^{\circ}\text{C}/\text{W}$ |

Note) \* : Value per element

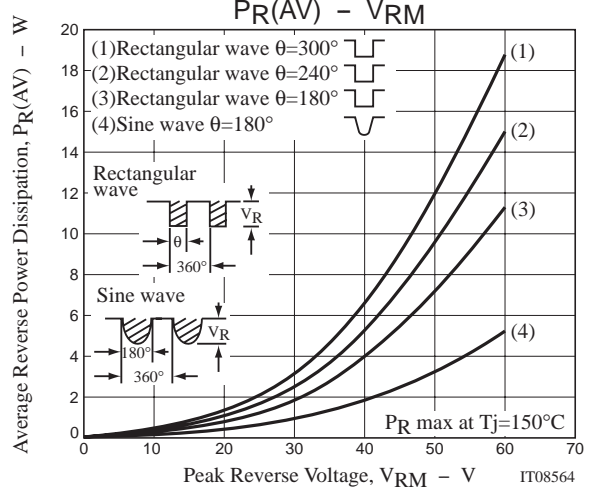
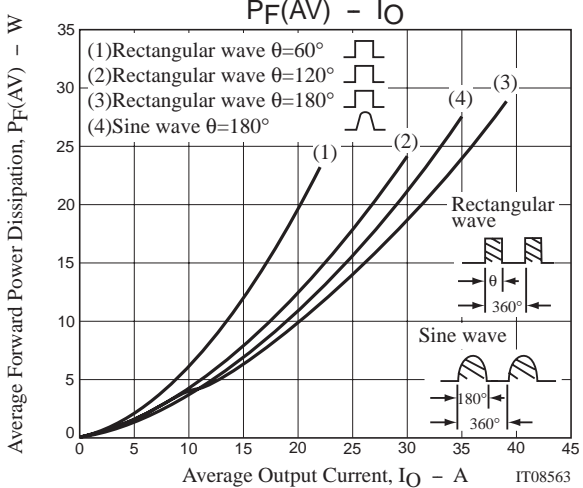
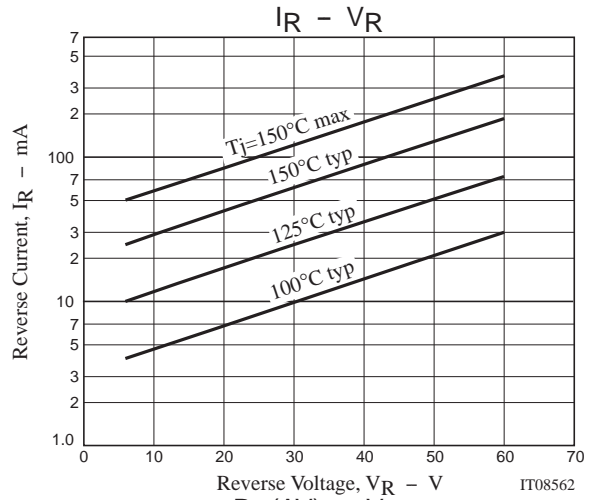
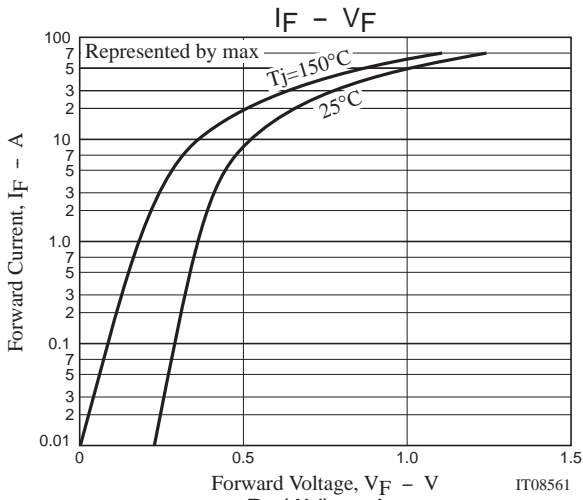
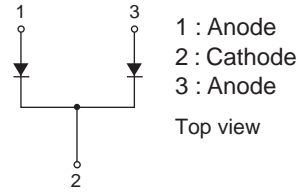
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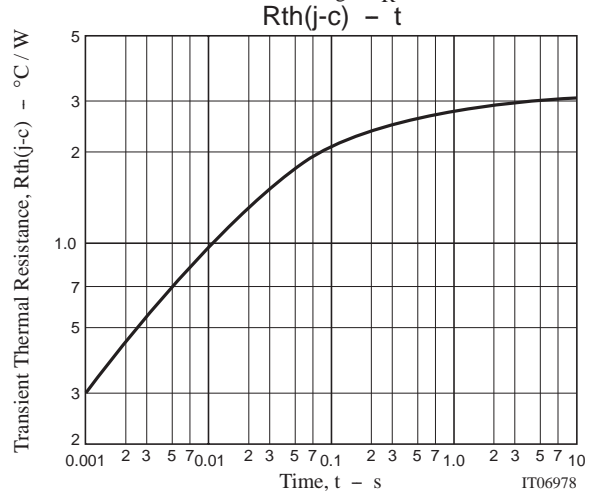
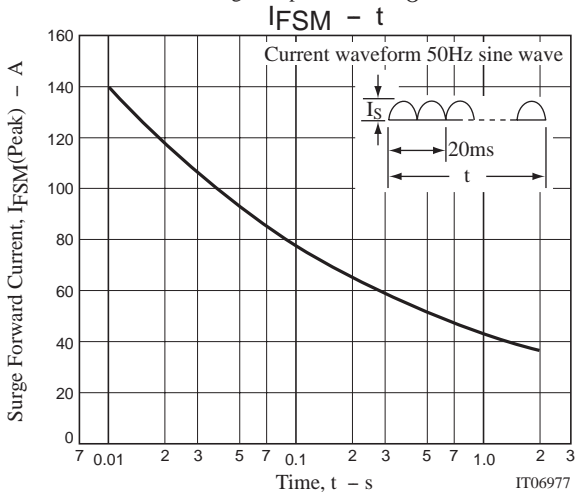
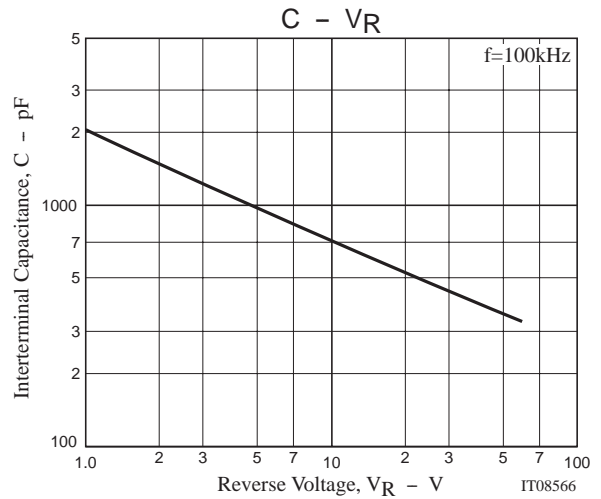
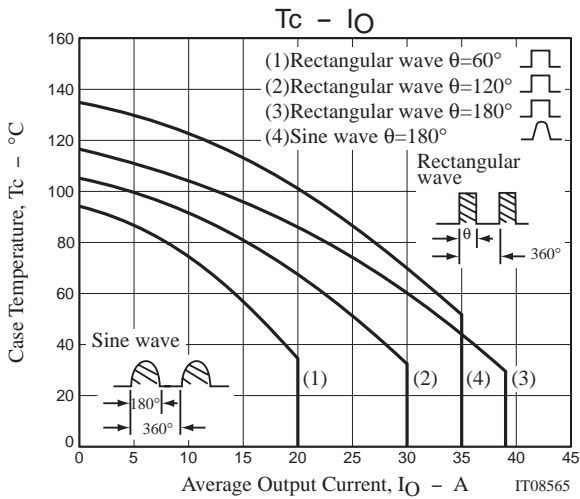
Package Dimensions

unit : mm  
7508-001



Electrical Connection





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