

**SB20-05J**

Schottky Barrier Diode (Twin Type · Cathode Common)

**50V, 2A Rectifier**

## Applications

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

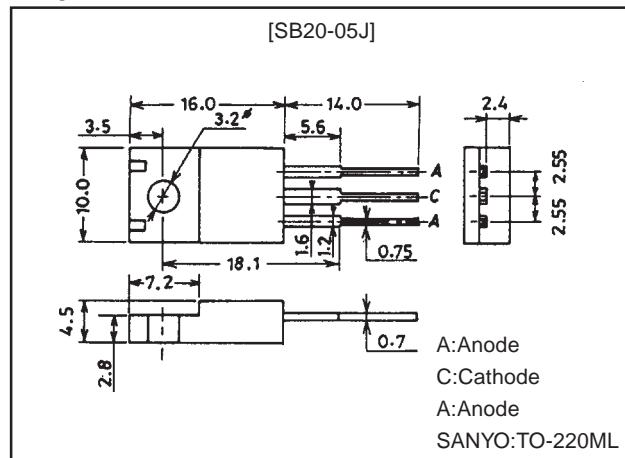
## Features

- Low forward voltage ( $V_F$  max=0.55V).
- Fast reverse recovery time (trr max=30ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.
- Micaless package facilitating easy mounting.

## Package Dimensions

unit:mm

1178



## Specifications

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

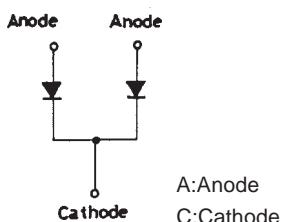
| Parameter                                | Symbol    | Conditions                                    | Ratings     | Unit             |
|--|-----------|---|-------------|------------------|
| Repetitive Peak Reverse Voltage          | $V_{RRM}$ |   | 50          | V                |
| Nonrepetitive Peak Reverse Surge Voltage | $V_{RSM}$ |   | 55          | V                |
| Average Output Current                   | $I_O$     | 50Hz, resistive load, $T_c=116^\circ\text{C}$ | 2           | A                |
| Surge Forward Current                    | $I_{FSM}$ | 50Hz sine wave, 1 cycle                       | 60          | A                |
| Junction Temperature                     | $T_j$     |   | -55 to +125 | $^\circ\text{C}$ |
| Storage Temperature                      | $T_{stg}$ |   | -55 to +125 | $^\circ\text{C}$ |

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

| Parameter             | Symbol      | Conditons   | Ratings |     |      | Unit                      |
|-----------------------|-------------|---|---------|-----|------|---------------------------|
|                       |             |   | min     | typ | max  |                           |
| Reverse Voltage       | $V_R$       | $I_R=0.5\text{mA}, T_j=25^\circ\text{C}, *$                               | 50      |     |      | V                         |
| Forward Voltage       | $V_F$       | $I_F=1\text{A}, T_j=25^\circ\text{C}, *$                                  |         |     | 0.55 | V                         |
| Reverse Current       | $I_R$       | $V_R=25\text{V}, T_j=25^\circ\text{C}, *$                                 |         |     | 0.1  | mA                        |
| Reverse Recovery Time | trr         | $I_F=2\text{A}, T_j=25^\circ\text{C}, *, -dI_F/dt=10\text{A}/\mu\text{s}$ |         |     | 30   | ns                        |
| Thermal Resistance    | $R_{thj-c}$ | Junction-Case:Smoothed DC   |         |     | 5.5  | $^\circ\text{C}/\text{W}$ |

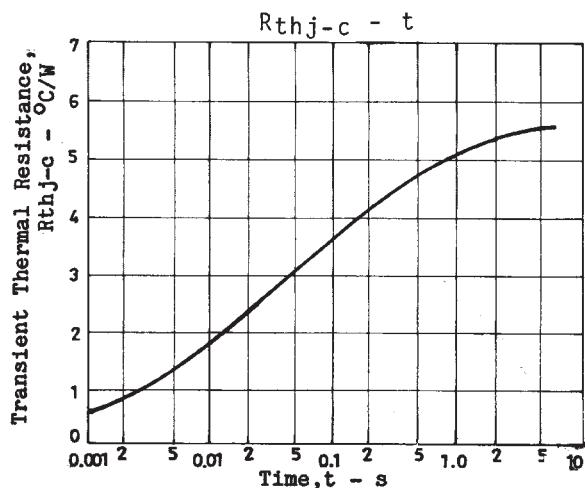
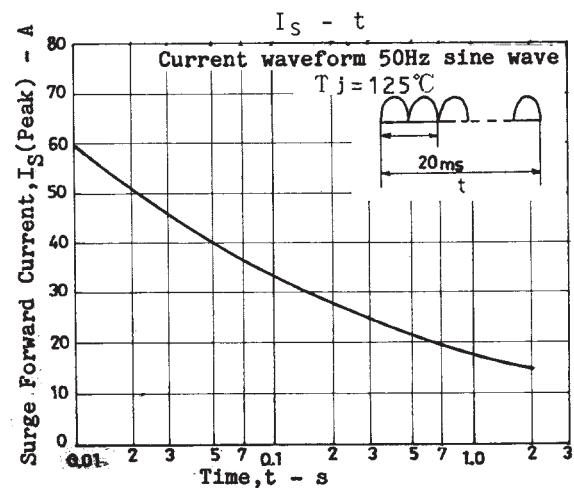
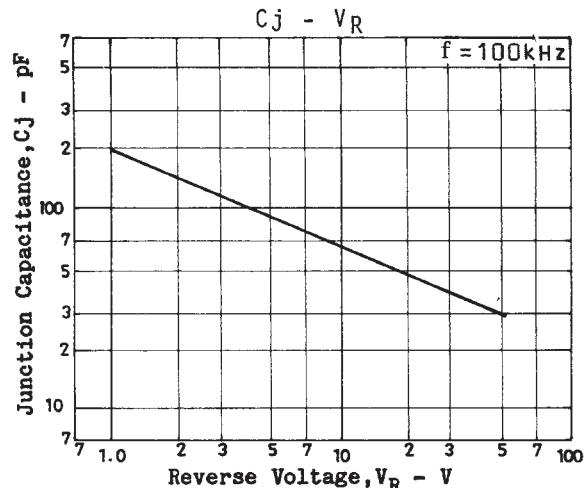
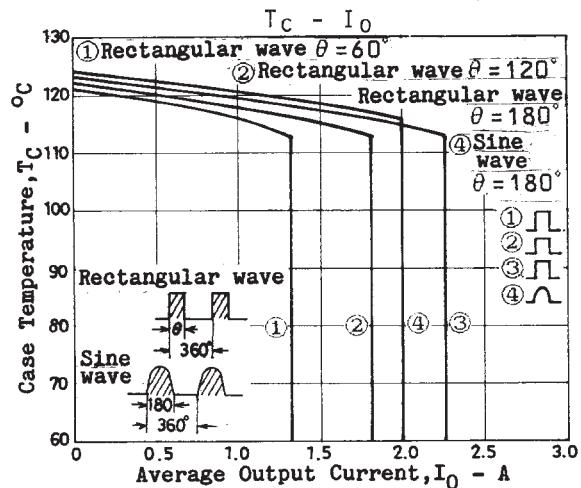
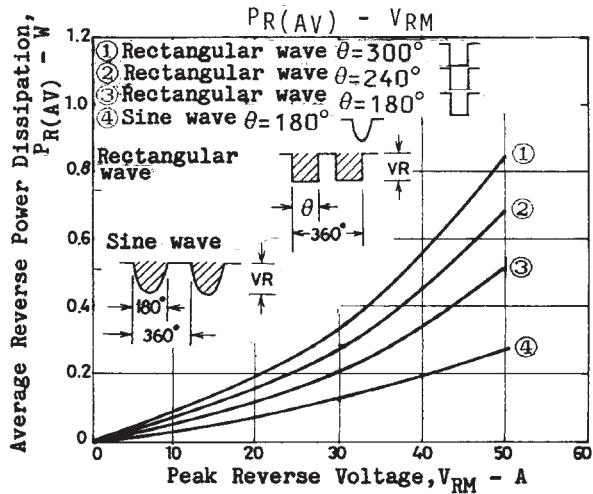
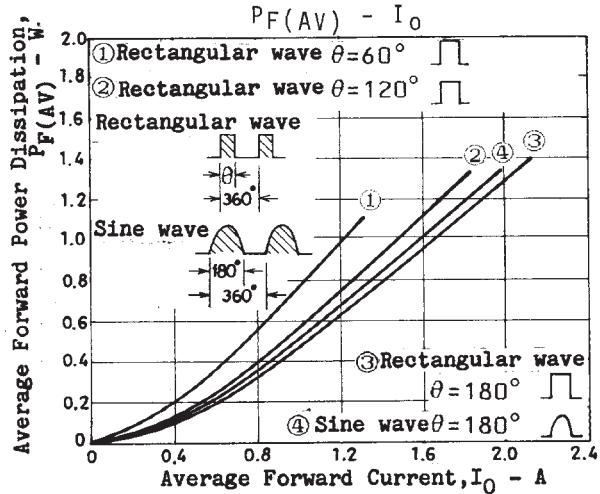
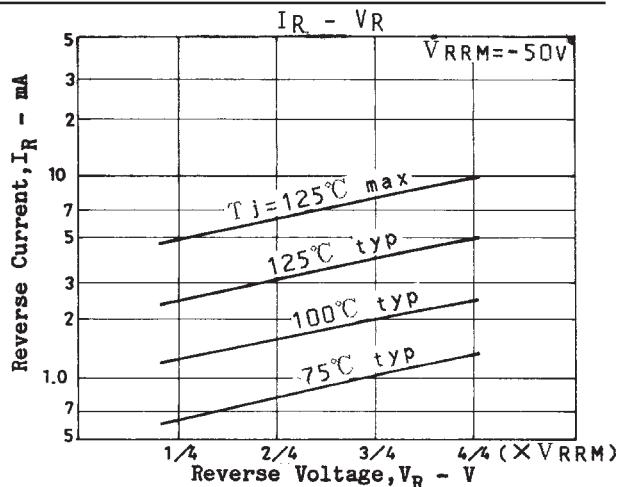
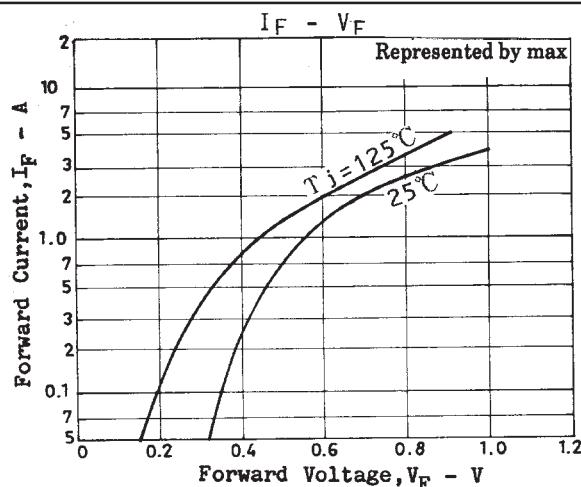
Note \*:Value per element

## Electrical Connection

**SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters**

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43098HA (KT)/N037AT, TS No.2493-1/3



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