



SB30W03V

Schottky Barrier Diode (Twin Type - Cathod Common)

30V, 3A Rectifier

Applications

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

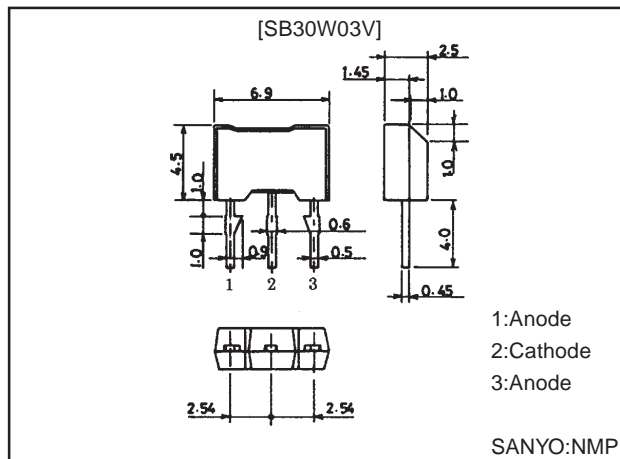
Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recovery time (t_{rr} max=30ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

Package Dimensions

unit:mm

1238A



Specifications

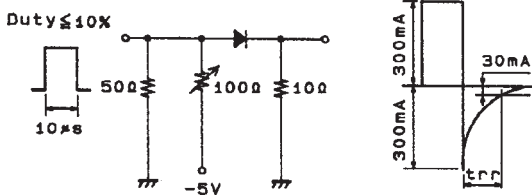
Absolute Maximum Ratings at Ta = 25°C (Value per element)

| Parameter | Symbol | Conditions | Ratings | Unit |
|--|-----------|-------------------------|-------------|------|
| Repetitive Peak Reverse Voltage | V_{RRM} | | 30 | V |
| Nonrepetitive Peak Reverse Surge Voltage | V_{RSM} | | 35 | V |
| Average Output Current | I_O | | 3 | A |
| Surge Forward Current | I_{FSM} | 50Hz sine wave, 1 cycle | 20 | A |
| Junction Temperature | T_j | | -55 to +125 | °C |
| Storage Temperature | T_{stg} | | -55 to +125 | °C |

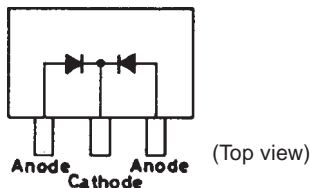
Electrical Characteristics at Ta = 25°C (Value per element)

| Parameter | Symbol | Conditons | Ratings | | | Unit |
|---------------------------|---------------|--|---------|-----|------|----------------------|
| | | | min | typ | max | |
| Reverse Voltage | V_R | $I_R=1\text{mA}$ | 30 | | | V |
| Forward Voltage | V_F | $I_F=3\text{A}$ | | | 0.55 | V |
| Reverse Current | I_R | $V_R=15\text{V}$ | | | 200 | μA |
| Interterminal Capacitance | C | $V_R=10\text{V}$, $f=1\text{MHz}$ | | 160 | | pF |
| Reverse Recovery Time | t_{rr} | $I_F=I_R=300\text{mA}$, See specified Test Circuit. | | | 30 | ns |
| Thermal Resistance | $R_{th(j-a)}$ | | | 110 | | $^{\circ}\text{C/W}$ |

trr Test Circuit



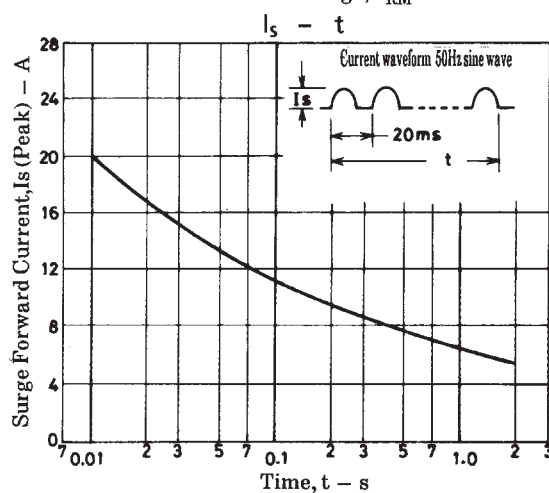
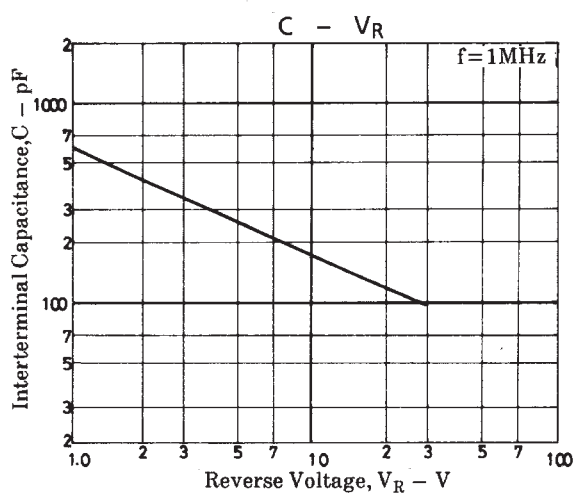
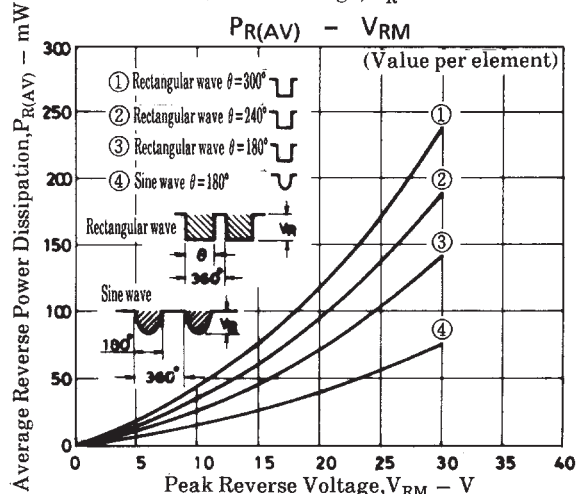
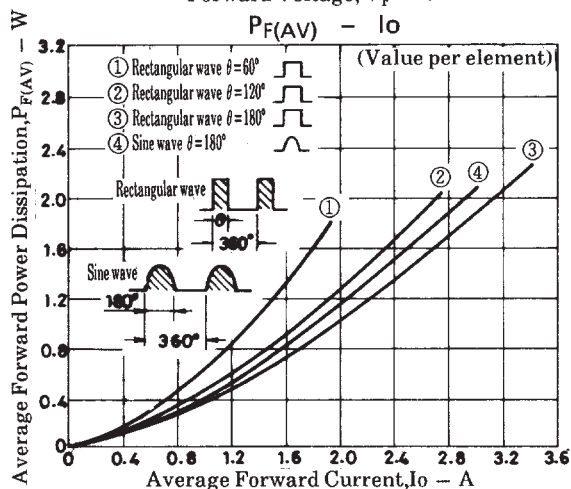
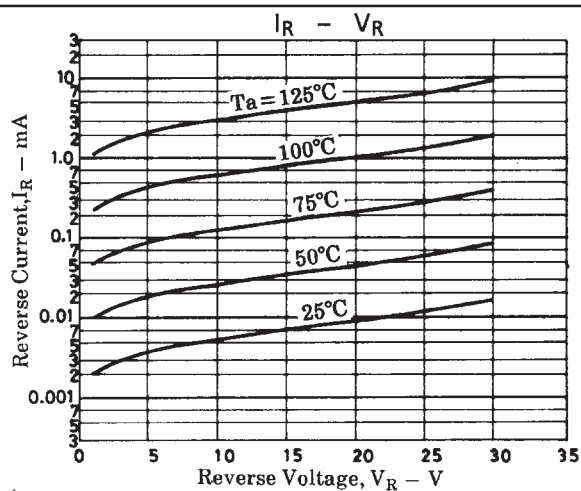
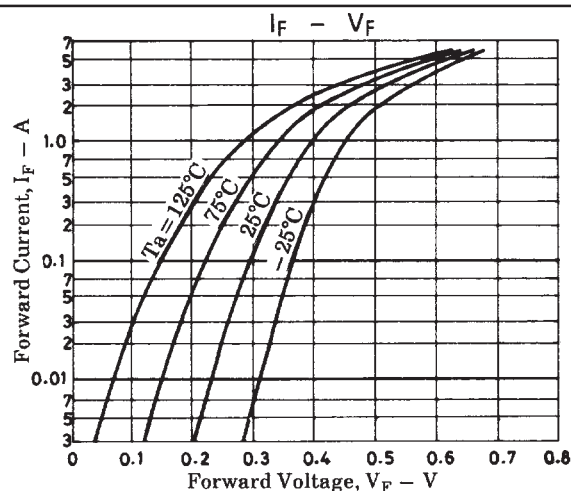
Electrical Connection



(Top view)

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