



SB05W05V

50V, 500mA Rectifier

Applications

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

Features

- Low forward voltage ($V_F \text{ max}=0.55\text{V}$).
- Fast reverse recovery time ($t_{rr} \text{ max}=10\text{ns}$).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

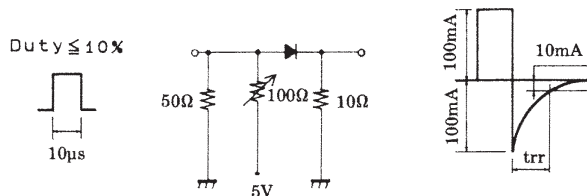
Absolute Maximum Ratings at $T_a=25^\circ\text{C}$ (Value per element)

| | | | unit |
|---------------------------------|-----------|-------------------------|------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 50 | V |
| Nonrepetitive Peak Reverse | V_{RSM} | 55 | V |
| Surge Voltage | | | |
| Average Output Current | I_o | 500 | mA |
| Surge Forward Current | I_{FSM} | 5 | A |
| | | 50Hz sine wave, 1 cycle | |
| Junction Temperature | T_j | -55 to +125 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55 to +125 | $^\circ\text{C}$ |

Electrical Characteristics at $T_a=25^\circ\text{C}$ (Value per element)

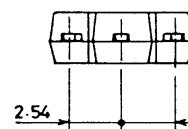
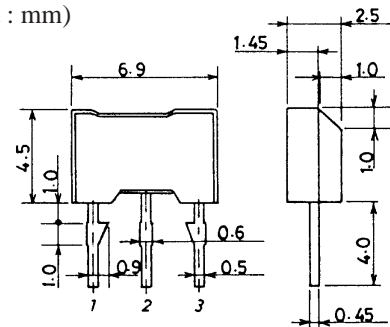
| | | | min | typ | max | unit |
|---------------------------|-------------|---|-----|-----|------|--------------------|
| Reverse Voltage | V_R | $I_R=200\mu\text{A}$ | 50 | | | V |
| Forward Voltage | V_F | $I_F=500\text{mA}$ | | | 0.55 | V |
| Reverse Current | I_R | $V_R=25\text{V}$ | | | 50 | μA |
| Interterminal Capacitance | C | $V_R=10\text{V}, f=1\text{MHz}$ | | 25 | | pF |
| Reverse Recovery Time | t_{rr} | $I_F=I_R=100\text{mA}$, See specified Test Circuit. | | | 10 | ns |
| Thermal Resistance | R_{thj-a} | | | 120 | | $^\circ\text{C/W}$ |

t_{rr} Test Circuit



Package Dimensions 1148A

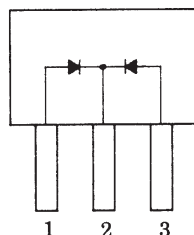
(unit : mm)



1 : Anode
2 : Cathode
3 : Anode

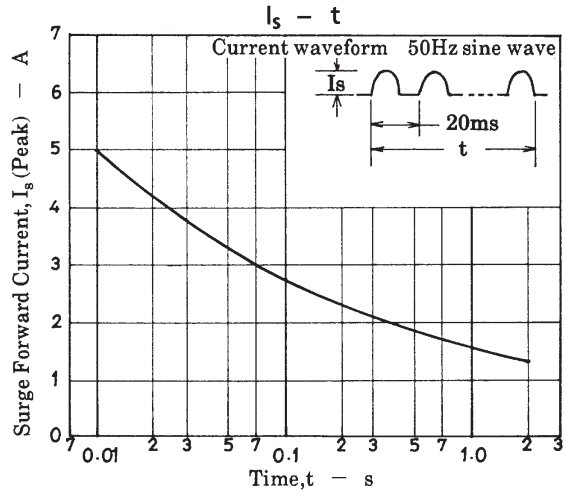
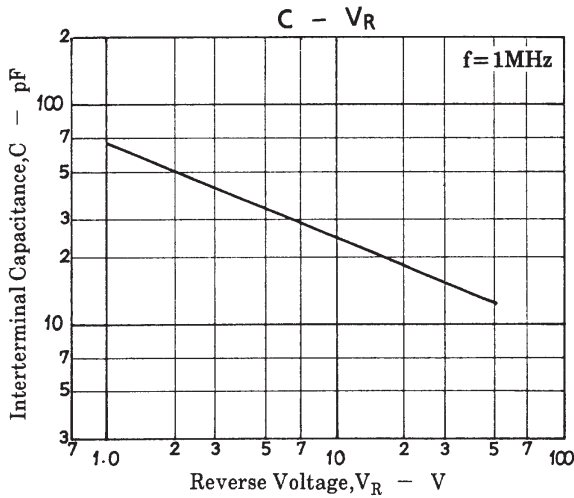
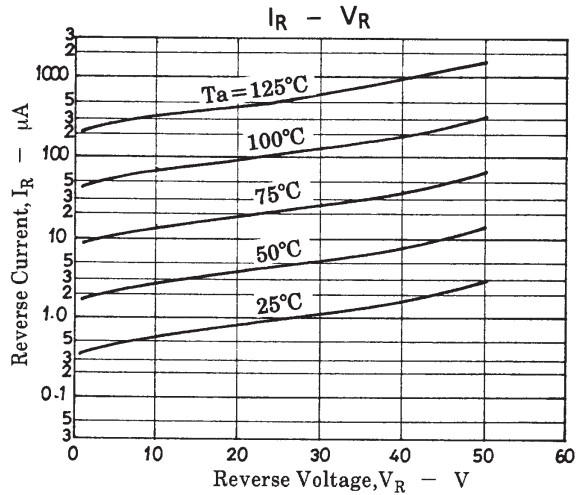
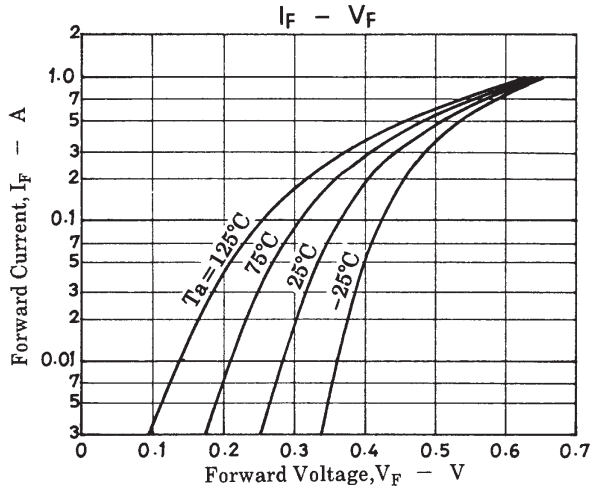
SANYO : NMP

Electrical Connection



1 : Anode
2 : Cathode
3 : Anode

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