



SBA50-04Y

Schottky Barrier Diode (Twin Type · Cathode Common)

40V, 5A Rectifier

Applications

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

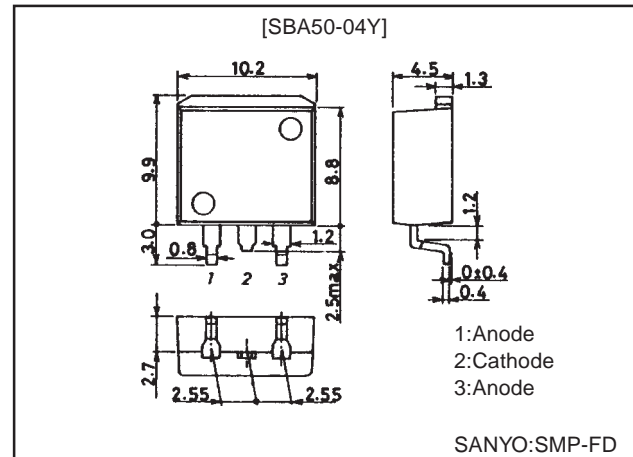
Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recovery time.
- Low switching noise.
- High reliability due to highly reliable planner structure.
- Surface mount type device reducing the assembling time and facilitating compact and high-density assembly of SBA50-04Y-applied equipment.

Package Dimensions

unit:mm

1262A



Specifications

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

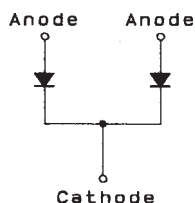
| Parameter | Symbol | Conditions | Ratings | Unit |
|--|-----------|---|-------------|------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | | 40 | V |
| Nonrepetitive Peak Reverse Surge Voltage | V_{RSM} | | 44 | V |
| Average Output Current | I_O | 50Hz, resistive load, $T_c=109^\circ\text{C}$ | 5 | A |
| Surge Forward Current | I_{FSM} | 50Hz sine wave, 1 cycle | 80 | A |
| Junction Temperature | T_j | | -55 to +125 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | | -55 to +125 | $^\circ\text{C}$ |

Electrical Characteristics

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---------------------------|---------------|--|---------|-----|------|--------------------|
| | | | min | typ | max | |
| Reverse Voltage | V_R | $I_R=1\text{mA}$, $T_j=25^\circ\text{C}$, * | 40 | | | V |
| Forward Voltage | V_F | $I_F=2.5\text{A}$, $T_j=25^\circ\text{C}$, * | | | 0.55 | V |
| Reverse Current | I_R | $V_R=20\text{V}$, $T_j=25^\circ\text{C}$, * | | | 0.1 | mA |
| Interterminal Capacitance | C | $V_R=10\text{V}$, $T_j=25^\circ\text{C}$, * | | 160 | | pF |
| Thermal Resistance | $R_{th(j-c)}$ | Junction-Case:Smoothed DC | | | 4.0 | $^\circ\text{C/W}$ |

Note*: Value per element

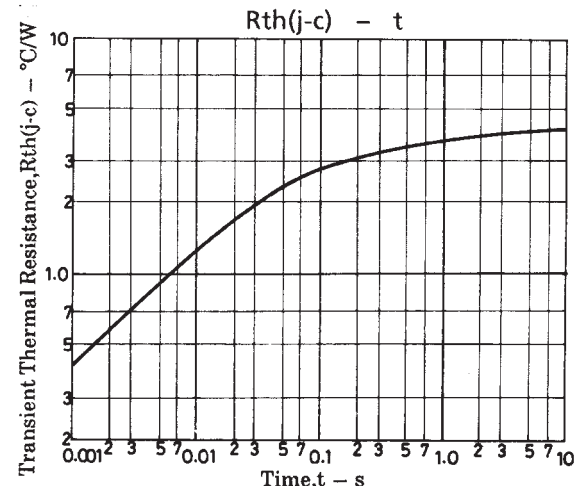
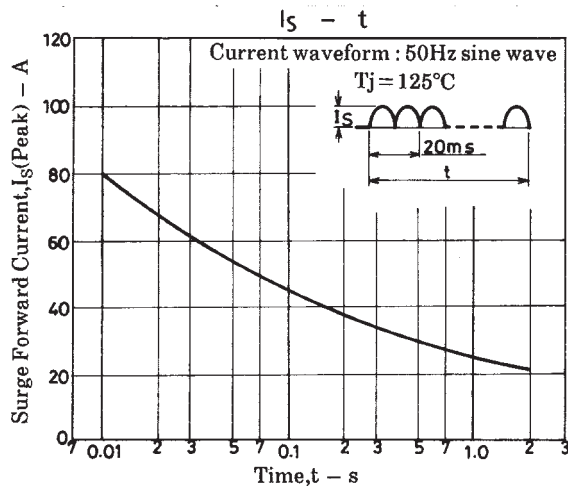
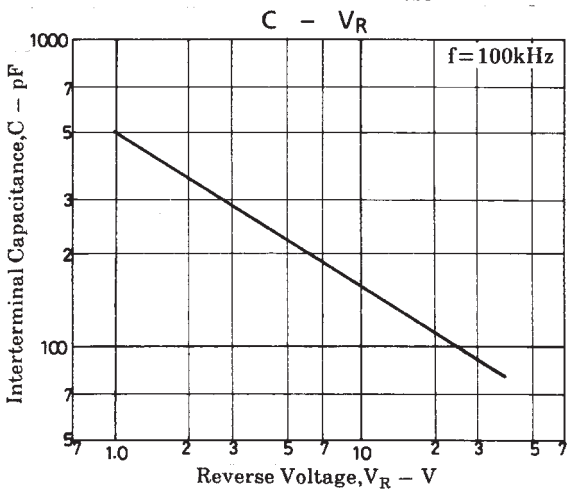
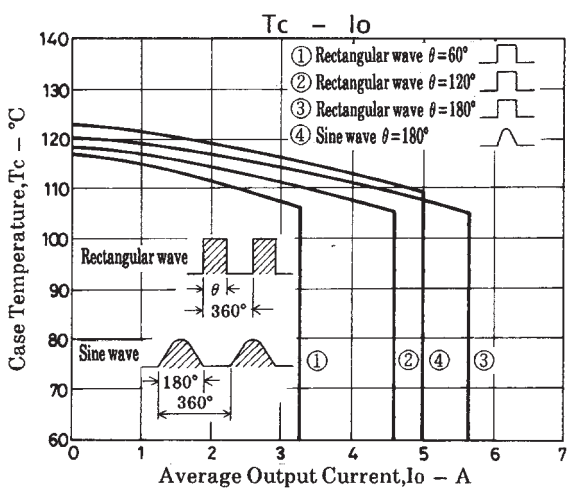
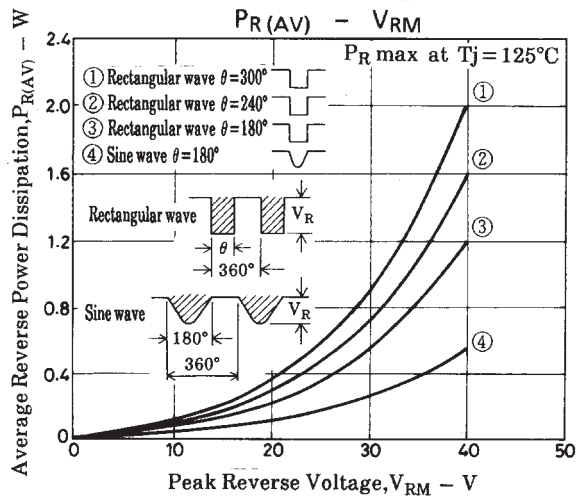
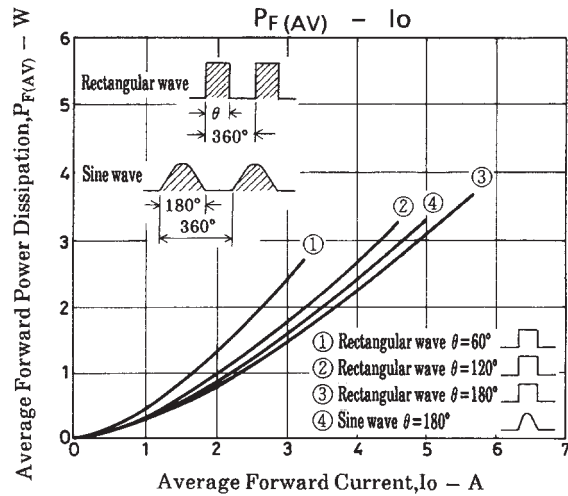
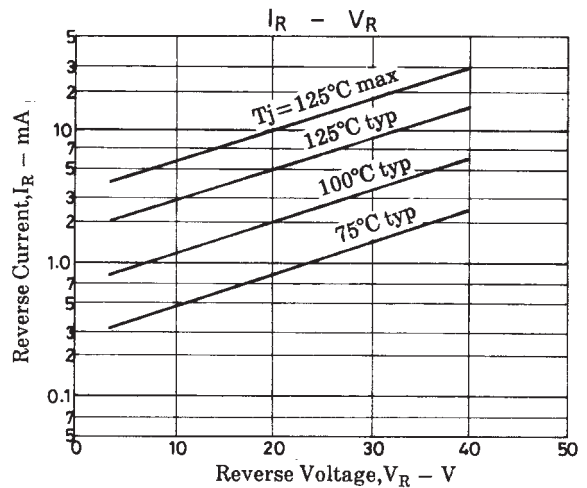
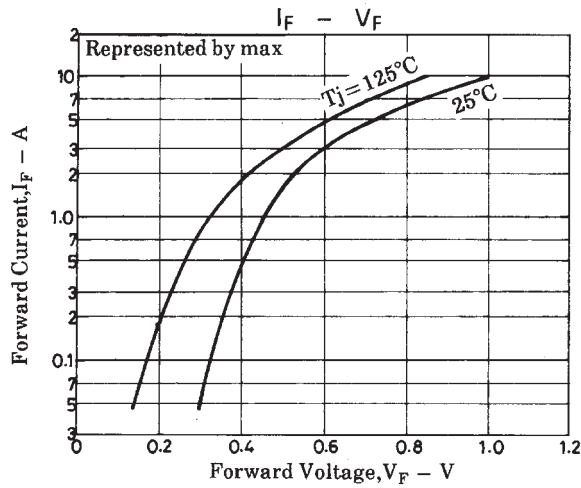
Electrical Connection



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SBA50-04Y



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