



SB10-04A3

Schottky Barrier Diode

40V, 1.0A Rectifier

Applications

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

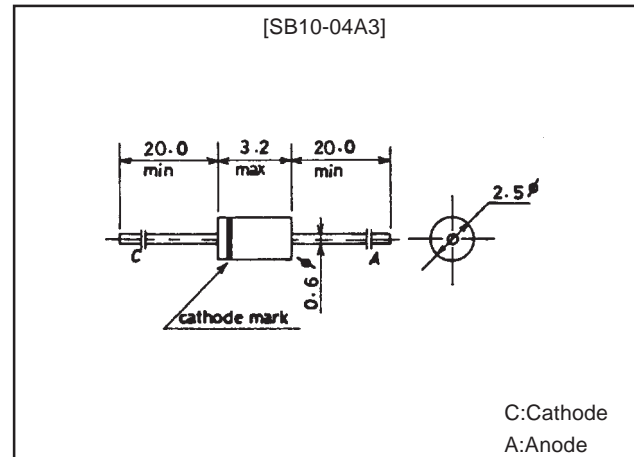
Features

- Meets the requirements for automatic mounter.
- Low forward voltage (V_F max=0.55V).
- Small capacitance (C typ=45pF).
- Average rectified current (I_O =1.0A).

Package Dimensions

unit:mm

1237



Specifications

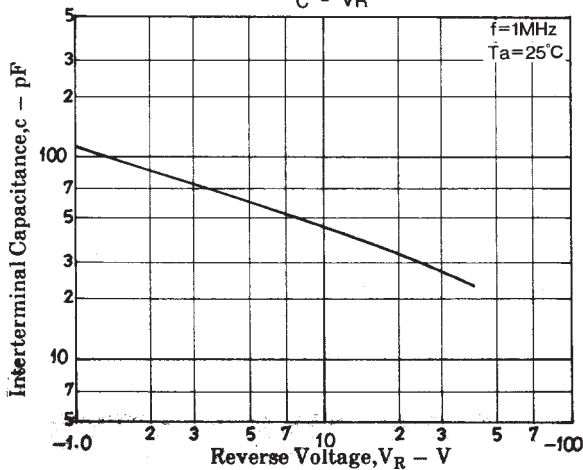
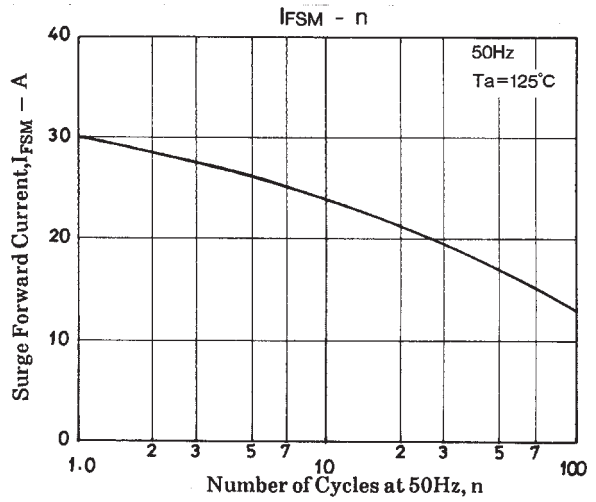
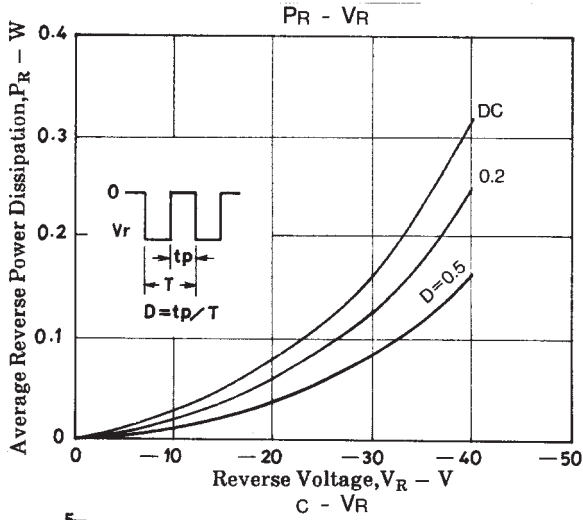
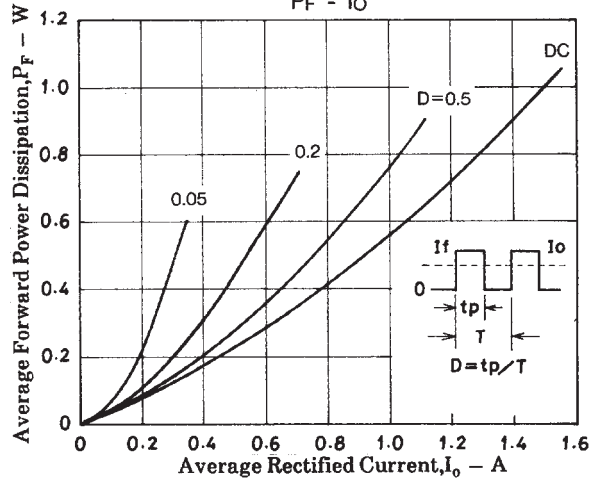
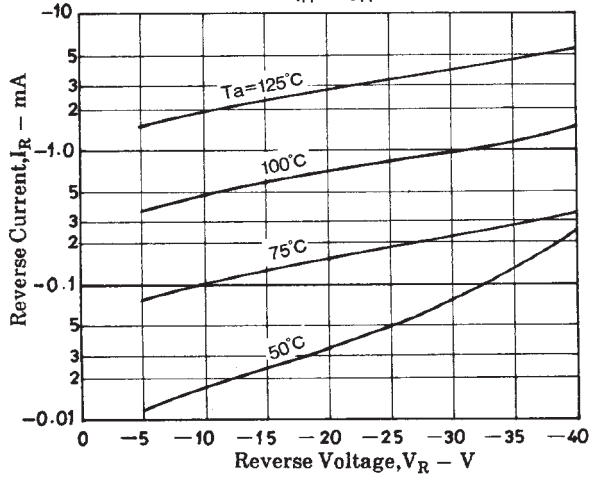
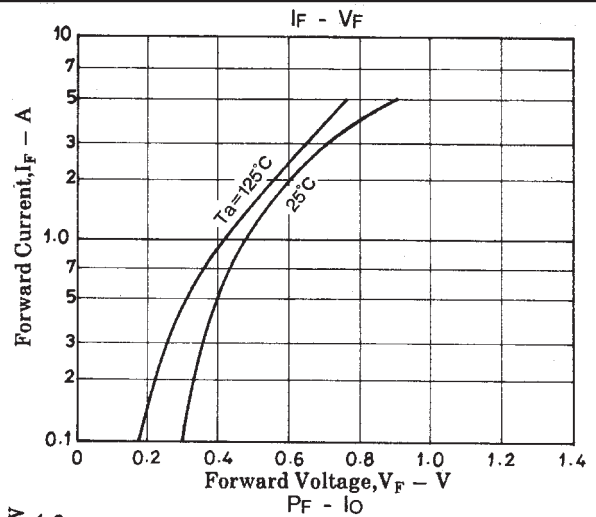
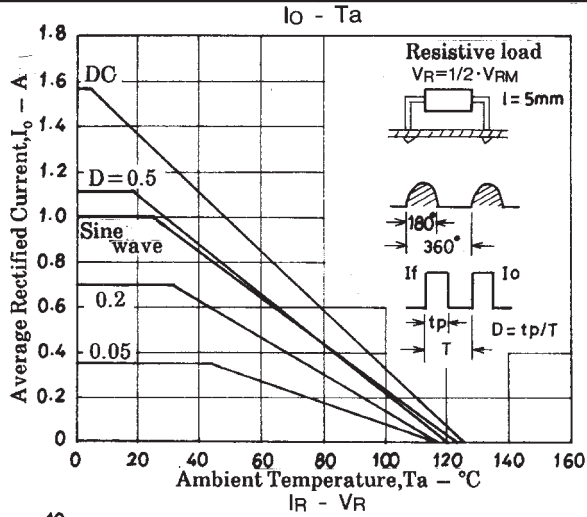
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Conditions | Ratings | Unit |
|--|-----------|---|-------------|------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | | 40 | V |
| Nonrepetitive Peak Reverse Surge Voltage | V_{RSM} | | 45 | V |
| Average Output Current | I_O | 50Hz, resistive load, sine wave, $T_a=25^\circ\text{C}$ L=5mm, 3mm ϕ print land | 1.0 | A |
| Surge Forward Current | I_{FSM} | 50Hz sine wave, 1 cycle | 30 | A |
| Junction Temperature | T_j | | 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 | Conditions | Ratings | | | Unit |
|---------------------------------------|---------------|------------------------------------|---------|-----|------|--------------------|
| | | | min | typ | max | |
| Forward Voltage | V_F | $I_F=1.0\text{A}$ | | | 0.55 | V |
| Reverse Current | I_R | $V_R=40\text{V}$ | | | 0.8 | mA |
| Interterminal Capacitance | C | $V_R=10\text{V}$, $f=1\text{MHz}$ | | 45 | | pF |
| Thermal Resistance (junction-Ambient) | $R_{th(j-a)}$ | Mounted on PCB | | | 113 | $^\circ\text{C/W}$ |

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