

**SB10-18**

Schottky Barrier Diode (Twin Type · Cathode Common)

80V, 1A Rectifier**Applications**

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

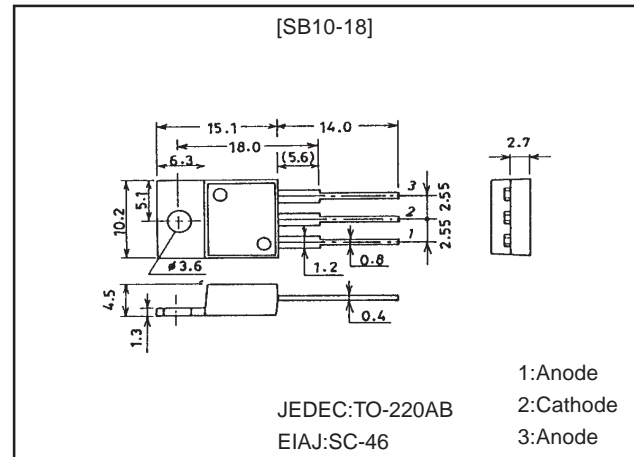
Features

- Low forward voltage (V_F max=0.85V).
- Fast reverse recovery time (t_{rr} max=35ns).
- Low switching noise.
- Low leakage current and highly reliability due to highly reliable planar structure.

Package Dimensions

unit:mm

1159B

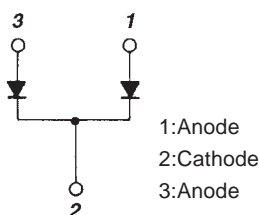
**Specifications****Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$**

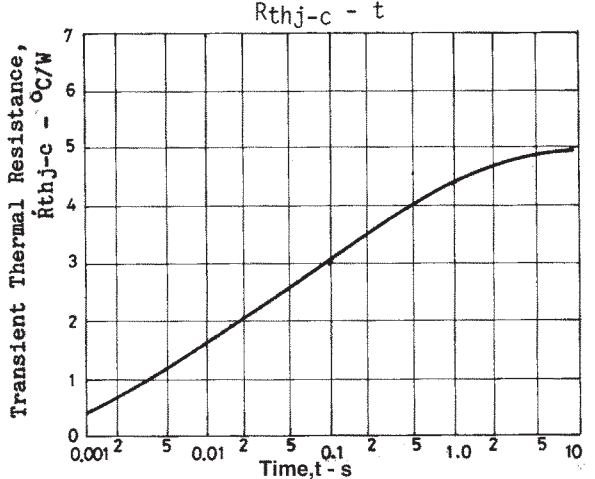
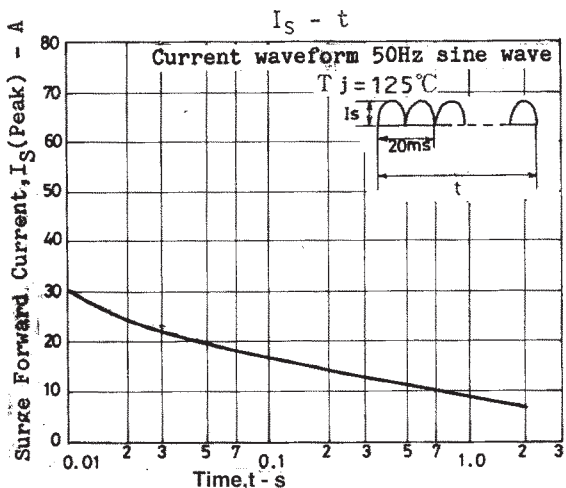
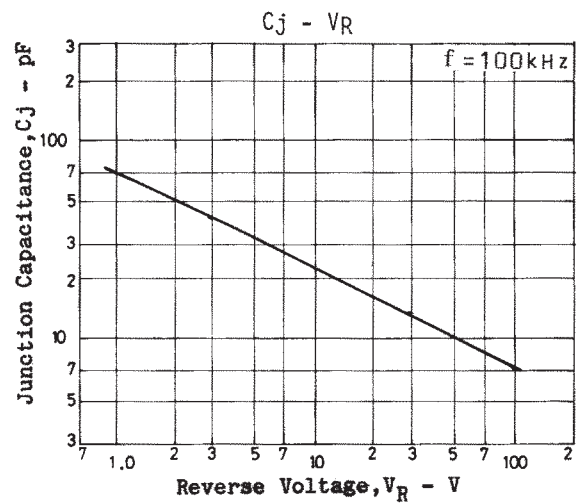
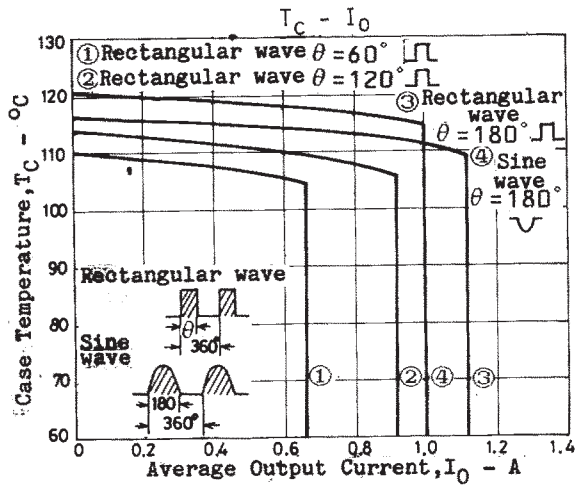
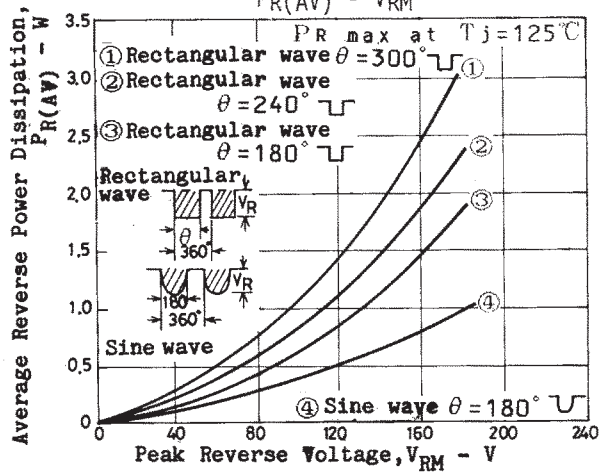
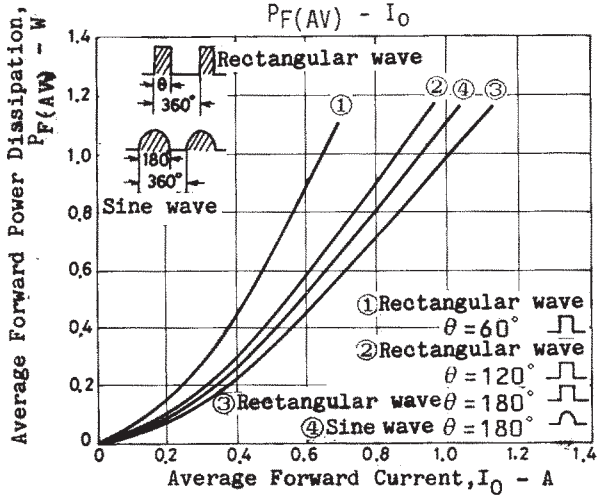
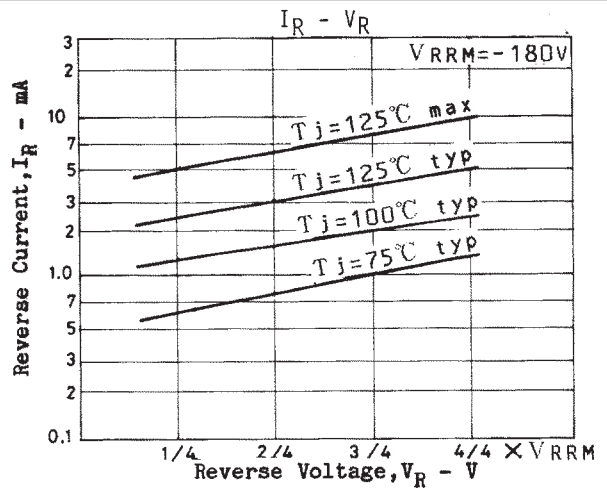
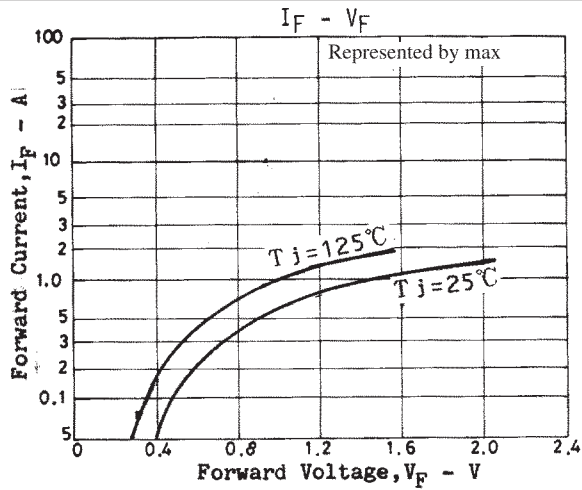
| Parameter | Symbol | Conditions | Ratings | Unit |
|--|-----------|---|-------------|------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | | 180 | V |
| Nonrepetitive Peak Reverse Surge Voltage | V_{RSM} | | 190 | V |
| Average Output Current | I_O | 50Hz, resistive load, $T_c=114^\circ\text{C}$ | 1 | A |
| Surge Forward Current | I_{FSM} | 50Hz sine wave, 1 cycle | 30 | 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 | $I_R=0.5\text{mA}$, $T_j=25^\circ\text{C}$, * | 180 | | | V |
| Forward Voltage | V_F | $I_F=0.4\text{A}$, $T_j=25^\circ\text{C}$, * | | | 0.85 | V |
| Reverse Current | I_R | $V_R=90\text{V}$, $T_j=25^\circ\text{C}$, * | | | 0.1 | mA |
| Reverse Recovery Time | t_{rr} | $I_F=2\text{A}$, $T_j=25^\circ\text{C}$, *, $-dI_F/dt=10\text{A}/\mu\text{s}$ | | | 35 | ns |
| Thermal Resistance | R_{thj-c} | Junction-Case:Smoothed DC | | | 5.0 | $^\circ\text{C}/\text{W}$ |

Note*: Value per element

Electrical Connection



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