



SS0203EJ

 — Schottky Barrier Diode

30V, 200mA Rectifier

Applications

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

Features

- Low switching noise.
- Low forward voltage ($I_F=150\text{mA}$, $V_F \text{ max}=0.4\text{V}$) ($I_F=200\text{mA}$, $V_F \text{ max}=0.45\text{V}$).
- Ultraminiature (1608 size) and thin (0.6mm) leadless package.

Specifications

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

| 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 | | 200 | mA |
| Surge Forward Current | I_{FSM} | 50Hz sine wave, 1 cycle | 2 | A |
| Junction Temperature | T_J | | -55 to +125 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | | -55 to +125 | $^\circ\text{C}$ |

Electrical Characteristics at $T_a=25^\circ\text{C}$

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---------------------------|---------------|--|---------|-----|------|-----------------------------|
| | | | min | typ | max | |
| Reverse Voltage | V_R | $I_R=100\mu\text{A}$ | 30 | | | V |
| Forward Voltage | V_{F1} | $I_F=150\text{mA}$ | | | 0.4 | V |
| | V_{F2} | $I_F=200\text{mA}$ | | | 0.45 | V |
| Reverse Current | I_R | $V_R=15\text{V}$ | | | 200 | μA |
| Reverse Recovery Time | t_{rr} | $I_F=I_R=10\text{mA}$, See specified Test Circuit. | | | 10 | ns |
| Interterminal Capacitance | C | $V_R=10\text{V}$, $f=1\text{MHz}$ | | 7.7 | | pF |
| Thermal Resistance | $R_{th(j-a)}$ | Mounted on a ceramic board (250mm ² ×0.8mm) | | 220 | | $^\circ\text{C} / \text{W}$ |

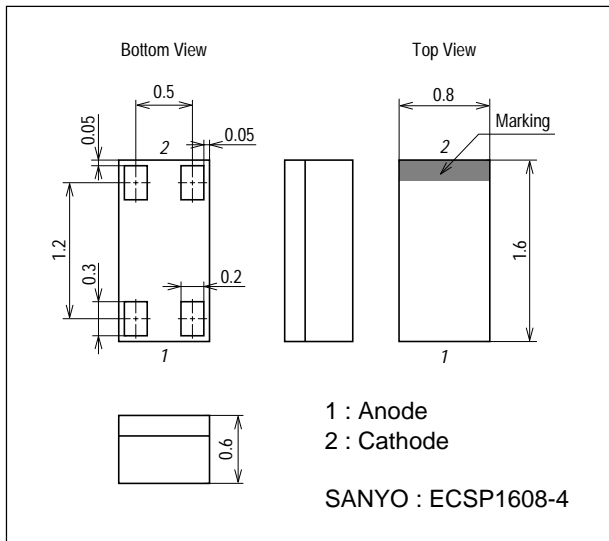
Marking : DC

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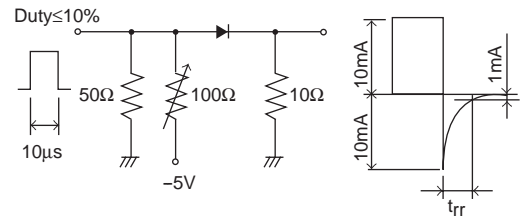
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Package Dimensions

unit : mm
1332



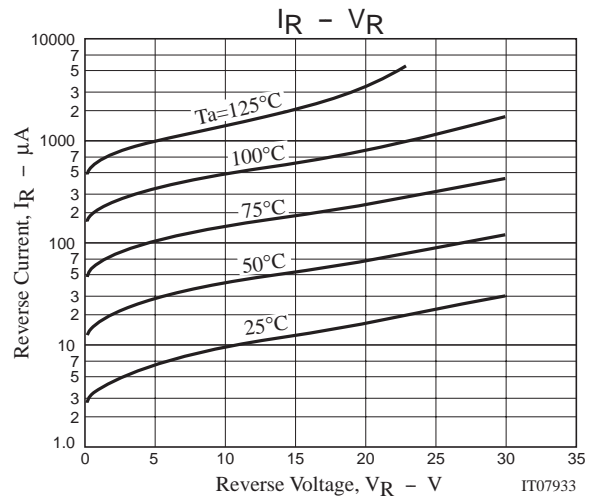
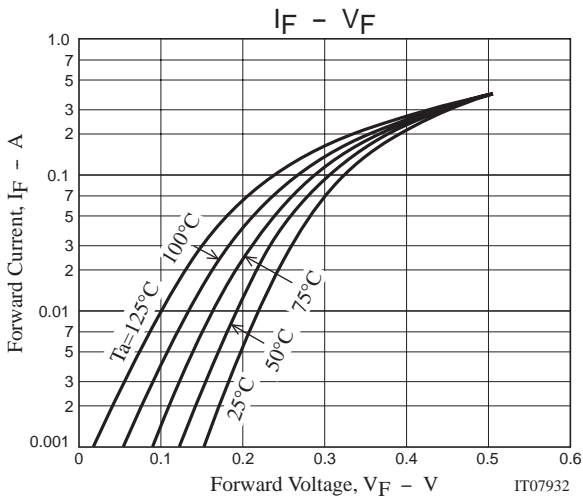
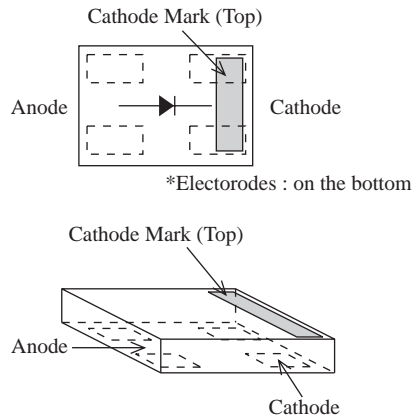
t_{rr} Test Circuit

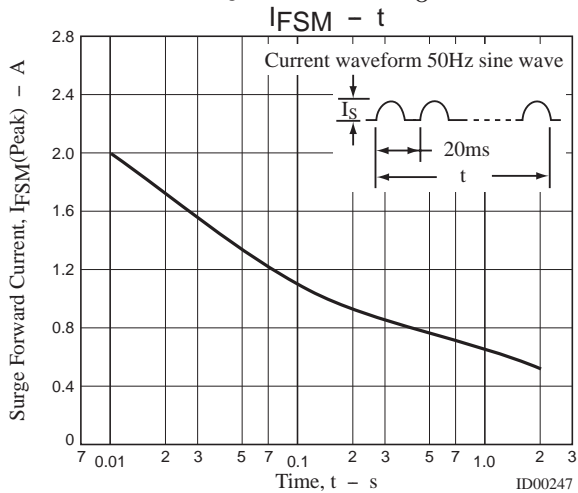
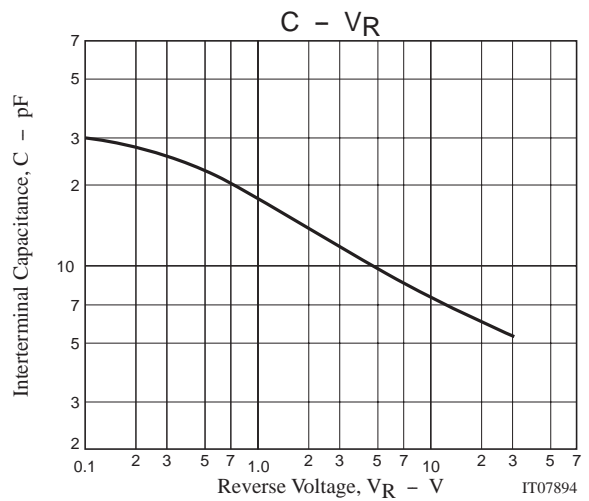
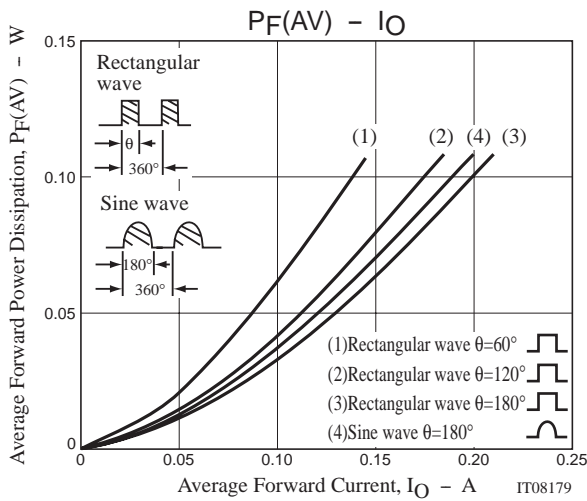


Type No. Indication (Top view)



Electrical Connection (Top view)





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