

MA21D380G

Silicon epitaxial planar type

For high frequency rectification

■ Features

- $I_{F(AV)} = 1$ A rectification is possible
- Low forward voltage V_F
- Large non-repetitive peak forward surge current I_{FSM}

■ Package

- Code
SMini2-F2
- Pin Name
1: Anode
2: Cathode

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

| Parameter | Symbol | Rating | Unit |
|---|-------------|-------------|------------------|
| Reverse voltage | V_R | 30 | V |
| Maximum peak reverse voltage | V_{RM} | 30 | V |
| Forward current (Average) | $I_{F(AV)}$ | 1.0 | A |
| Non-repetitive peak forward surge current * | I_{FSM} | 20 | A |
| Junction temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage time | T_{stg} | -55 to +125 | $^\circ\text{C}$ |

■ Marking Symbol: 3U

Note) *: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

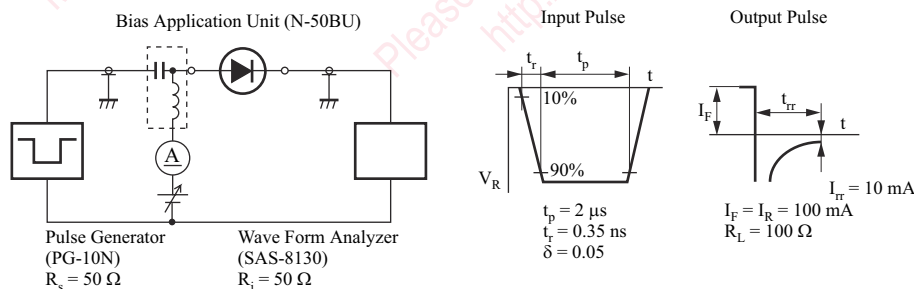
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

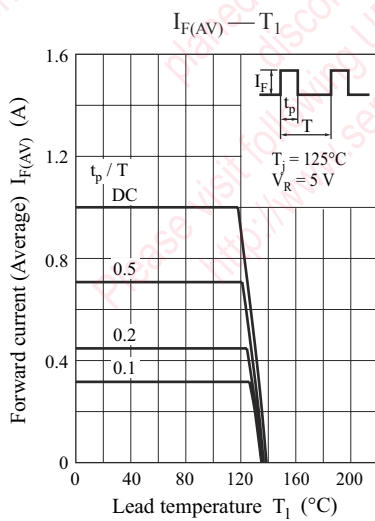
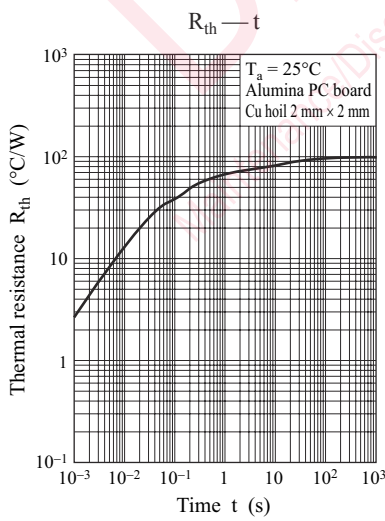
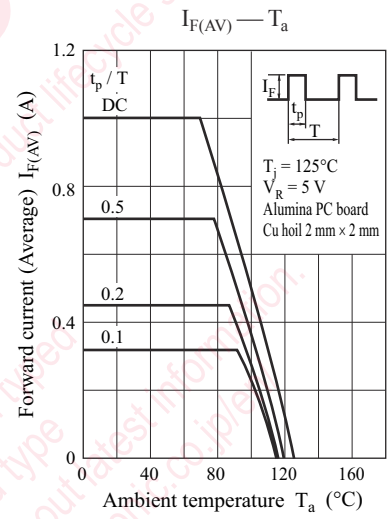
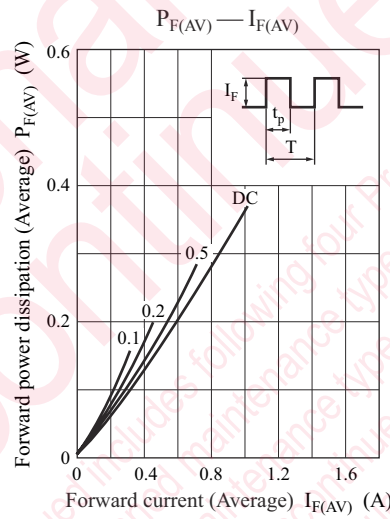
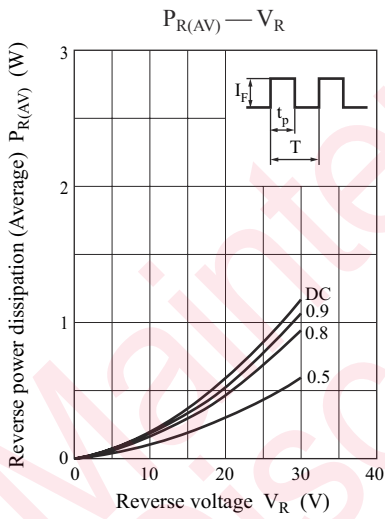
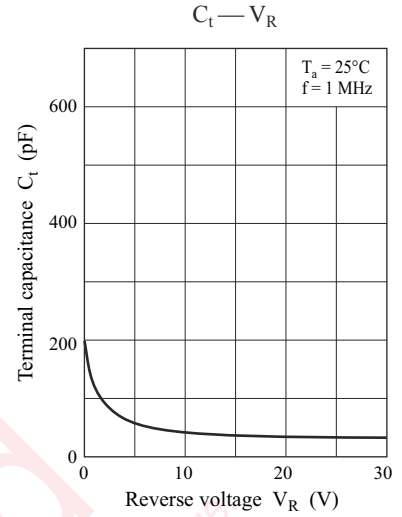
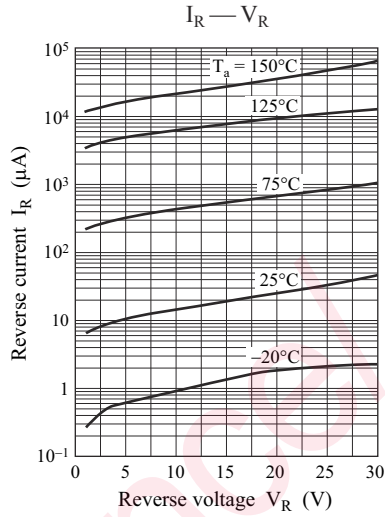
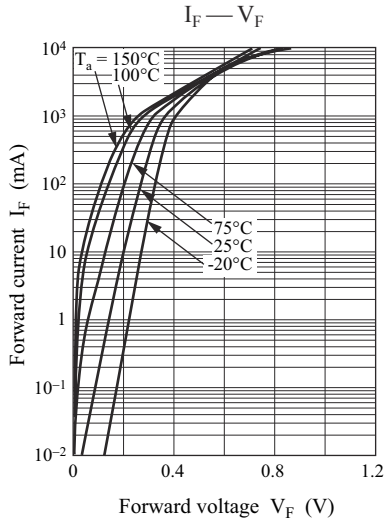
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|----------|--|-----|------|------|---------------|
| Forward voltage | V_{F1} | $I_F = 0.5$ A | | 0.34 | 0.38 | V |
| | V_{F2} | $I_F = 0.7$ A | | 0.36 | 0.40 | |
| | V_{F3} | $I_F = 1.0$ A | | 0.38 | 0.42 | |
| Reverse current | I_R | $V_R = 30$ V | | | 100 | μA |
| Terminal capacitance | C_t | $V_R = 10$ V, $f = 1$ MHz | | 40 | | pF |
| Reverse recovery time * | t_{rr} | $I_F = I_R = 100$ mA, $I_{rr} = 10$ mA, $R_L = 100 \Omega$ | | 13 | | ns |

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

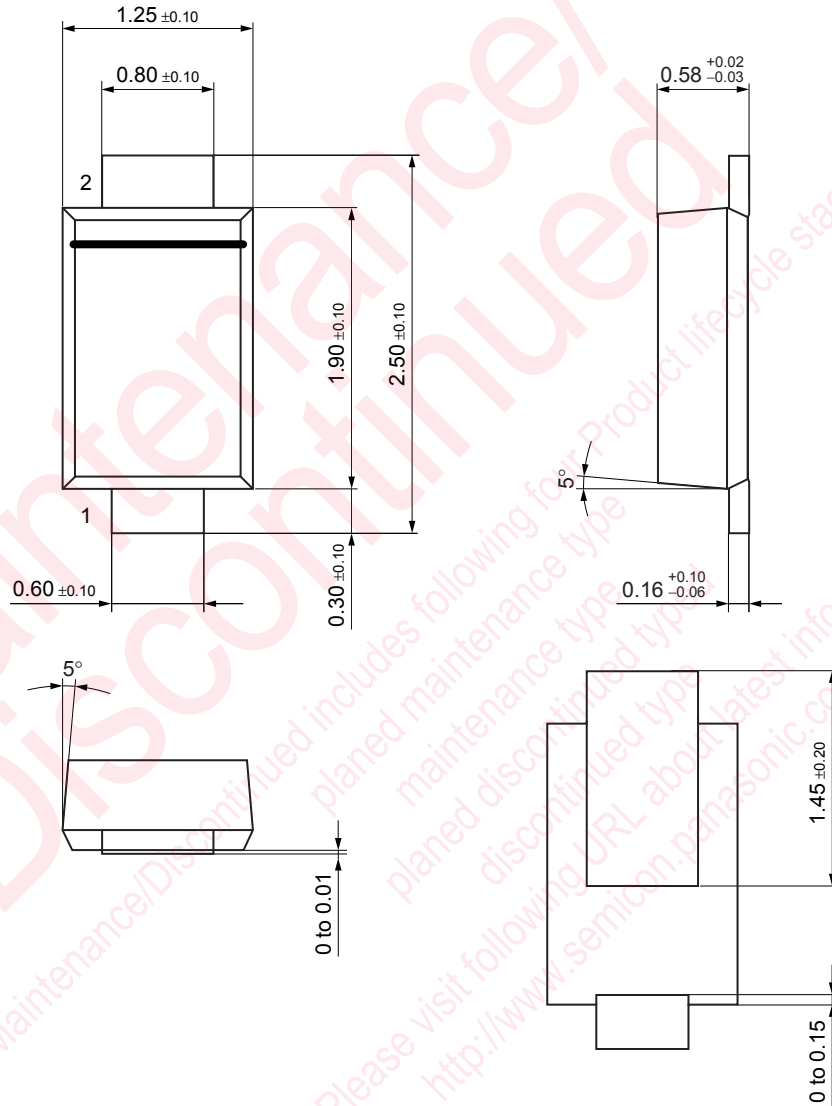
3. *: t_{rr} measurement circuit





SMini2-F2

Unit: mm



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