

MA4X796

Silicon epitaxial planar type

For super-high speed switching circuit

For small current rectification

■ Features

- Two MA3X787s in the same direction are contained in one package
- Allowing to rectify under ($I_{F(AV)} = 100$ mA) condition
- Optimum for high-frequency rectification because of its short reverse recovery time (t_{rr})
- Low V_F (forward rise voltage), with high rectification efficiency
- Reverse voltage V_R (DC value) = 50 V guaranteed

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

| Parameter | Symbol | Rating | Unit |
|---|----------------------|-------------|------------------|
| Reverse voltage (DC) | V_R | 50 | V |
| Repetitive peak reverse voltage | V_{RRM} | 50 | V |
| Peak forward current | Single | I_{FM} | 300 |
| | Double* ² | | 200 |
| Average forward current | Single | $I_{F(AV)}$ | 100 |
| | Double* ² | | 70 |
| Non-repetitive peak forward surge current* ¹ | I_{FSM} | 1 | A |
| Junction temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +125 | $^\circ\text{C}$ |

Note) *1 : The peak-to-peak value in one cycle of 50 Hz sine-wave (non-repetitive)

*2 : Value per chip

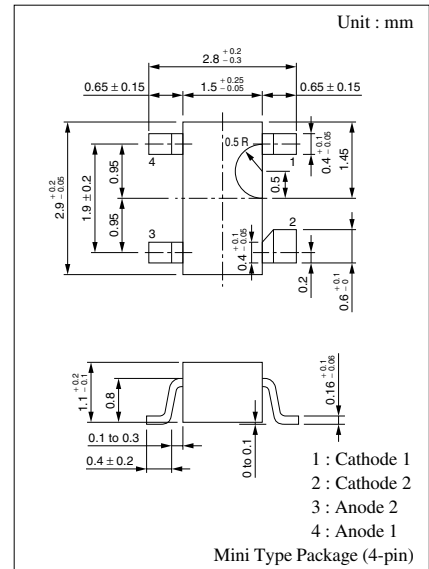
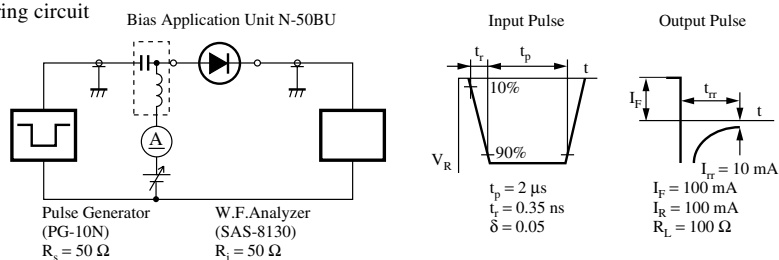
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|------------------------|----------|--|-----|-----|------|---------------|
| Reverse current (DC) | I_R | $V_R = 50$ V | | | 30 | μA |
| Forward voltage (DC) | V_F | $I_F = 100$ mA | | | 0.55 | V |
| Terminal capacitance | C_t | $V_R = 0$ V, $f = 1$ MHz | | 25 | | pF |
| Reverse recovery time* | t_{rr} | $I_F = I_R = 100$ mA $I_{rr} = 10$ mA, $R_L = 100$ Ω | | 3 | | ns |

Note) 1. Schottky barrier diode 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.

2. Rated input/output frequency: 200 MHz

3. * : t_{rr} measuring circuit



Marking Symbol: M4B

Internal Connection

