

MA3X788 (MA788)

Silicon epitaxial planar type

For super high speed switching
For small current rectification

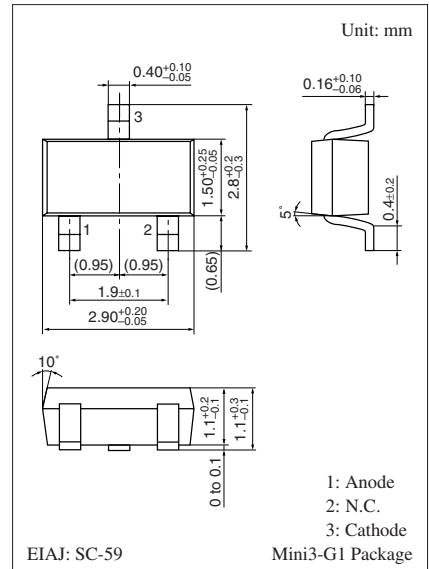
■ Features

- Forward current (Average) $I_{F(AV)} = 200$ mA rectification is possible
- Reverse voltage $V_R = 60$ V is guaranteed

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

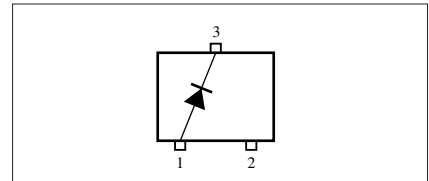
| Parameter | Symbol | Rating | Unit |
|---|-------------|-------------|------------------|
| Reverse voltage | V_R | 60 | V |
| Repetitive peak reverse voltage | V_{RRM} | 60 | V |
| Peak forward current | I_{FM} | 300 | mA |
| Forward current (Average) | $I_{F(AV)}$ | 200 | mA |
| Non-repetitive peak forward surge current * | I_{FSM} | 1 | A |
| Junction temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +125 | $^\circ\text{C}$ |

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



Marking Symbol: M3V

Internal Connection



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

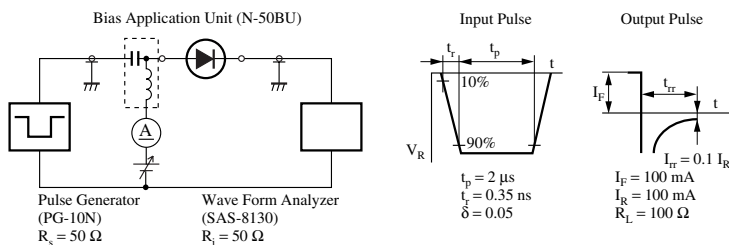
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|----------|---|-----|-----|------|---------------|
| Forward voltage | V_F | $I_F = 200$ mA | | | 0.65 | V |
| Reverse current | I_R | $V_R = 50$ V | | | 50 | μA |
| Terminal capacitance | C_t | $V_R = 0$ V, $f = 1$ MHz | | 30 | | pF |
| Reverse recovery time * | t_{rr} | $I_F = I_R = 100$ mA $I_{rr} = 0.1 I_R$, $R_L = 100 \Omega$ | | 3.0 | | ns |

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

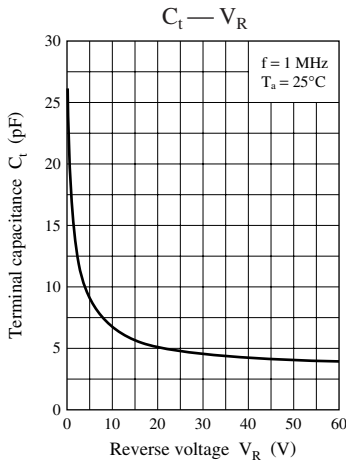
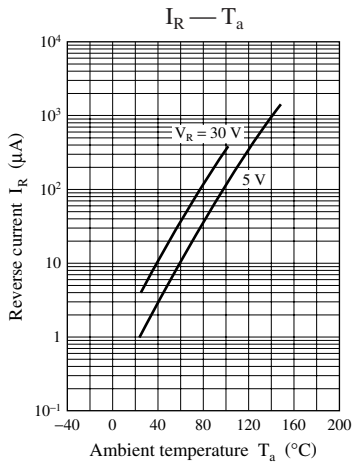
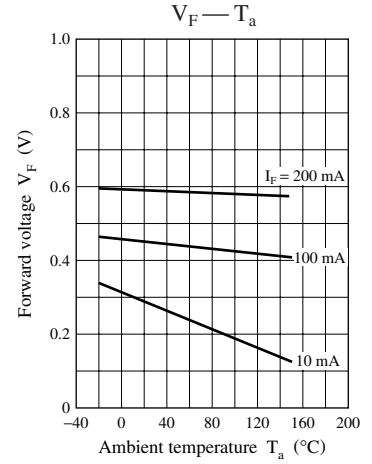
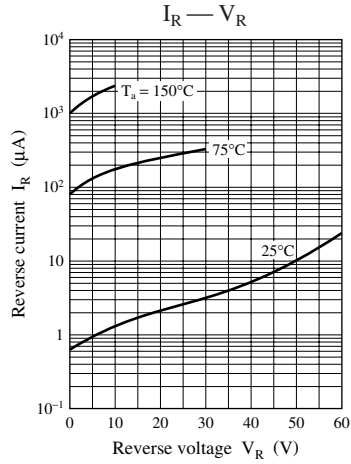
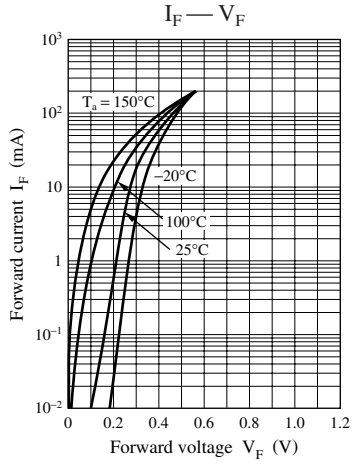
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

3. Absolute frequency of input and output is 1 GHz.

4. *: t_{rr} measurement circuit



Note) The part number in the parenthesis shows conventional part number.



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