

# ANTREX Electronics

## Electronic Components Sourcing Information

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### Product Reference Information

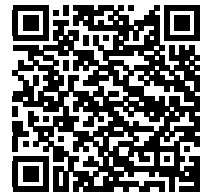
|                      |                                 |
|----------------------|---------------------------------|
| <b>Part Number:</b>  | MA3X78800L                      |
| <b>Manufacturer:</b> | Panasonic Electronic Components |
| <b>Package:</b>      | TO-236-3, SC-59, SOT-23-3       |
| <b>Availability:</b> | Please confirm with sales       |

**Product Page:**

<https://antrexco.com/product/details/panasonic-electronic-components/ma3x78800l.html>

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### Contact Information

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### Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

**Note:**

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

# 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)

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

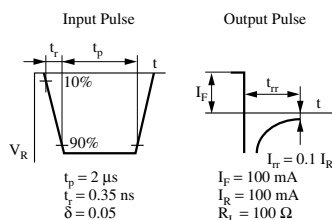
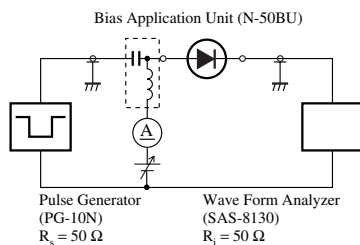
| Parameter               | Symbol   | Conditions                                                      | Min | Typ | Max  | Unit          |
|-------------------------|----------|-----------------------------------------------------------------|-----|-----|------|---------------|
| Forward voltage   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

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

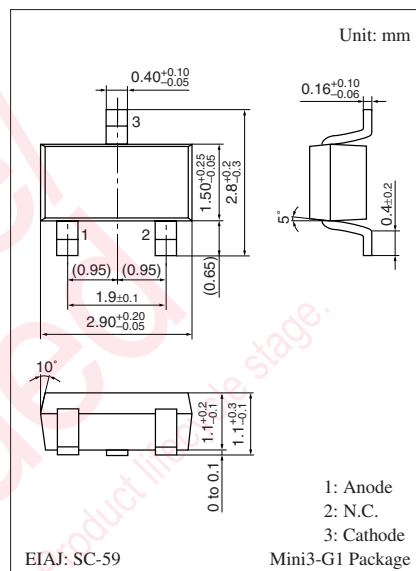
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

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

4. \*:  $t_{rr}$  measurement circuit

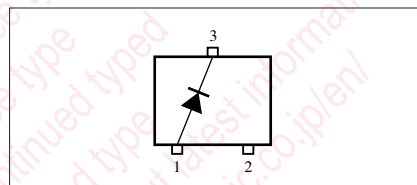


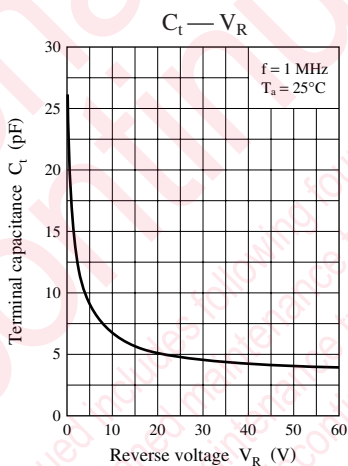
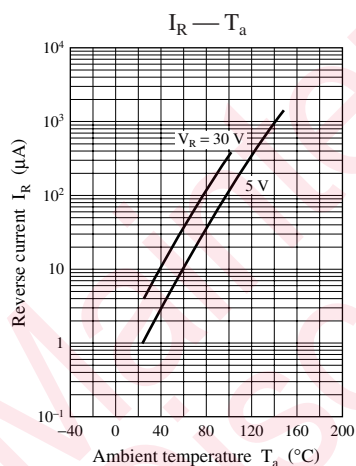
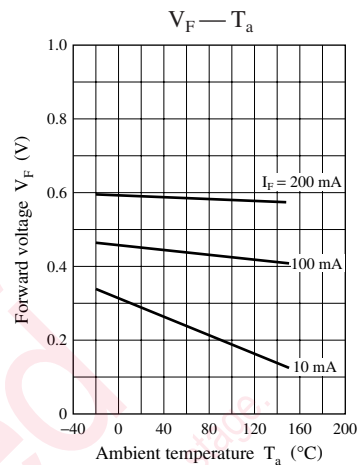
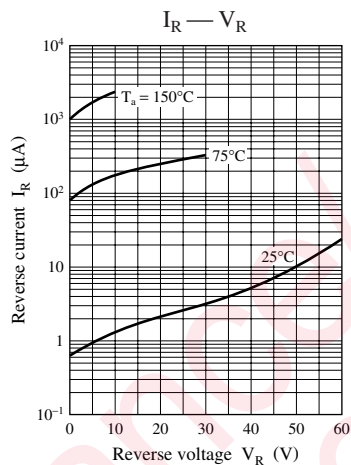
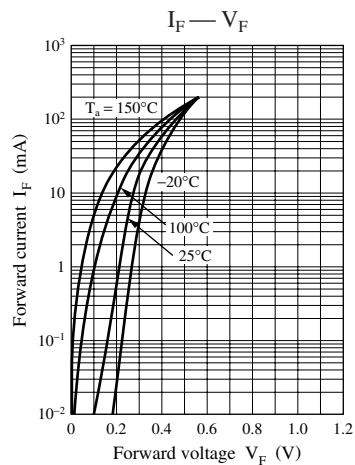
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M3V

Internal Connection





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