## **MA22D39**

## Silicon epitaxial planar type

For high speed switching circuits

#### ■ Features

- ullet Optimum for forward current (Effective value)  $I_{F(RMS)} = 1.57 A$  rectification
- $\bullet$  Reverse voltage  $V_R = 40 \text{ V}$  is guaranteed

## ■ Absolute Maximum Ratings $T_a = 25$ °C

| Parameter                                    | Symbol              | Rating      | Unit |  |
|--|---------------------|-------------|------|--|
| Reverse voltage                              | V <sub>R</sub>      | 40          | V    |  |
| Maximum peak reverse voltage                 | $V_{RM}$            | 40          | V    |  |
| Forward current (Effective value) *1         | I <sub>F(RMS)</sub> | 1.57        | A    |  |
| Non-repetitive peak forward surge current *2 | I <sub>FSM</sub>    | 30          | A    |  |
| Junction temperature                         | $T_{j}$             | 150         | °C   |  |
| Storage temperature                          | T <sub>stg</sub>    | -55 to +150 | °C   |  |

Note) \*1: Mounted on an alumina PC board

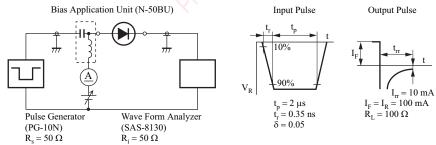
#### ■ Package

- Code
- Mini2-F1
- Pin Name
  - 1: Anode
  - 2: Cathode
- Marking Symbol: 3N

### ■ Electrical Characteristics $T_a = 25$ °C±3°C

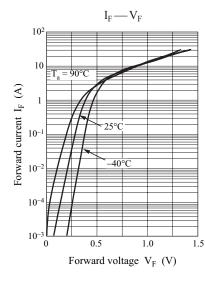
| Parameter                                  | Symbol                 | Conditions   | Min   | Тур  | Max  | Unit |
|--|------------------------|--|-------|------|------|------|
| Forward voltage $V_{F1}$ $V_{F2}$ $V_{F3}$ | $V_{F1}$               | $I_{\rm F} = 0.5{\rm A}$   |       |      | 0.48 | V    |
|  | $V_{F2}$               | $I_{\rm F} = 1.1  {\rm A}$   |       |      | 0.54 |      |
|  | I <sub>F</sub> = 1.5 A | 3  | ),    | 0.57 |      |      |
| Reverse current                            | $I_R$                  | $V_R = 40 \text{ V}$   | Silve |      | 100  | μΑ   |
| Terminal capacitance                       | $C_{t}$                | $V_R = 10 \text{ V, } f = 1 \text{ MHz}$                                 |       | 50   |      | pF   |
| Reverse recovery time *                    | t <sub>rr</sub>        | $I_F = I_R = 100 \text{ mA}, I_{rr} = 10 \text{ mA},$ $R_L = 100 \Omega$ |       | 30   |      | ns   |

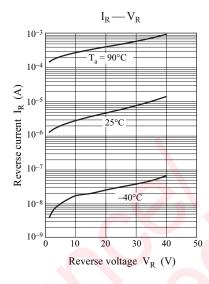
- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
  - 2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
  - 3. \*: t<sub>rr</sub> measurement circuit

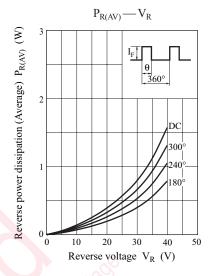


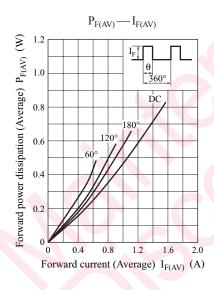
<sup>\*2: 50</sup> Hz sine wave 1 cycle (Non-repetitive peak current)

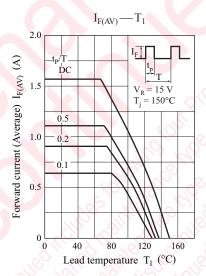
MA22D39 Panasonic







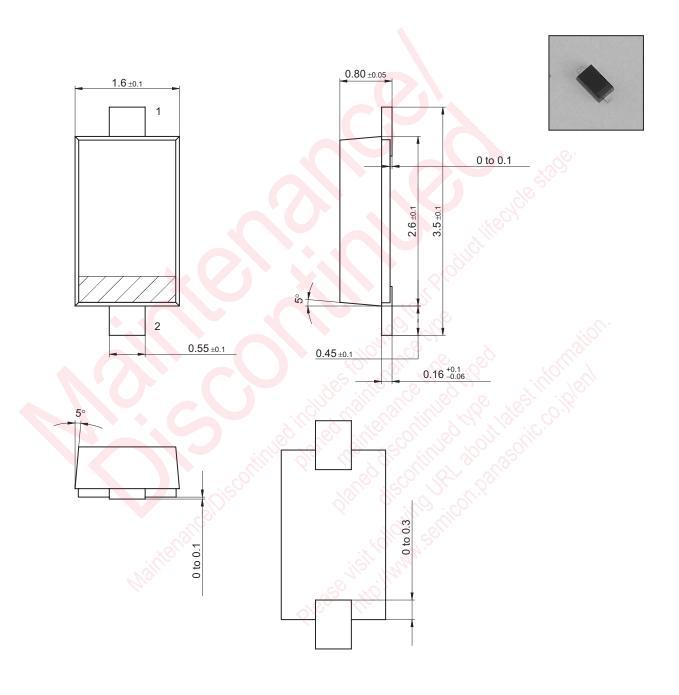




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Panasonic MA22D39

Mini2-F1 Unit: mm



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