# **MA2Q737** (MA737)

## Silicon epitaxial planar type

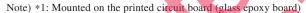
### For high frequency rectification

#### ■ Features

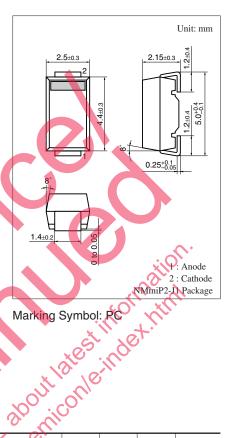
- Forward current (Average)  $I_{F(AV)} = 1.5$  A rectification is possible
- Reverse voltage  $V_R = 30 \text{ V}$  is guaranteed
- Automatic insertion with the emboss taping is possible

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

| Parameter                                    | Symbol             | Rating      | Unit |  |
|--|--------------------|-------------|------|--|
| Reverse voltage                              | $V_R$              | 30          | V    |  |
| Repetitive peak reverse voltage              | V <sub>RRM</sub>   | 30          | y    |  |
| Forward current (Average) *1                 | I <sub>F(AV)</sub> | 1.5         | A    |  |
| Non-repetitive peak forward surge current *2 | I <sub>FSM</sub>   | 60          | A    |  |
| Junction temperature                         | T <sub>j</sub>     | -40 to +125 | °C   |  |
| Storage temperature                          | T <sub>stg</sub>   | -40 to +125 | °C \ |  |



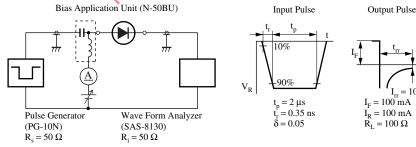
\*2: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)



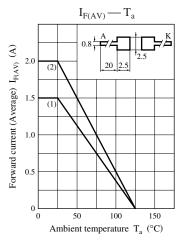
## ■ Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

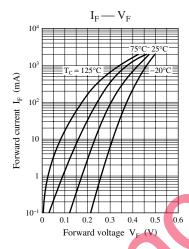
| Parameter               | Symbol          | Conditions                                 | Min | Тур | Max  | Unit |
|-------------------------|-----------------|--|-----|-----|------|------|
| Forward voltage         | $V_{\rm F}$     | $I_F = 2.0 \text{ A}$                      |     |     | 0.50 | V    |
| Reverse current         | $I_R$           | $V_R = 30 \text{ V}$                       |     |     | 1    | mA   |
| Terminal capacitance    | $C_{t}$         | $V_R = 10 V$ , $f = 1 MHz$                 |     | 70  |      | pF   |
| Reverse recovery time * | t <sub>rr</sub> | $I_F = I_R = 100 \text{ mA}$               |     |     | 50   | ns   |
|                         |                 | $I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$ |     |     |      |      |

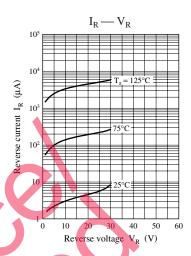
- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
  - 2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
  - 3. Absolute frequency of input and output is 20 MHz.
  - 4. \*: t<sub>rr</sub> measurement circuit



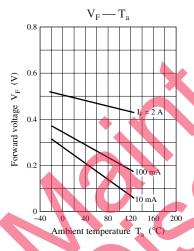
Note) The part number in the parenthesis shows conventional part number.

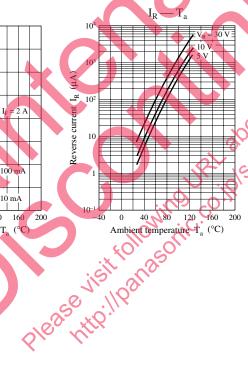


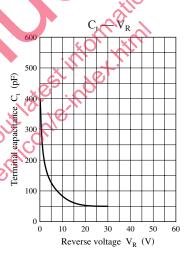




- (1) Printed circuit board: Glass Epoxy PC board (2) Printed circuit board: Alumina PC board Copper foil: Both A and K sides
- 2.5 mm × 2.5 mm + 0.8 mm × 20 mm







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