

# MA2HD09

## Silicon epitaxial planar type

For high frequency rectification

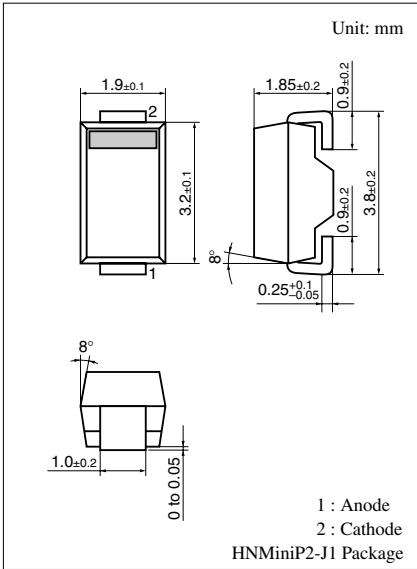
### ■ Features

- $I_{F(AV)} = 1$  A rectification is possible
- Low forward voltage:  $V_F < 0.40$  V (at  $I_F = 1$  A)
- Half New Mini-power package

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

| Parameter                                   | Symbol      | Rating      | Unit             |
|---------------------------------------------|-------------|-------------|------------------|
| Reverse voltage (DC)                        | $V_R$       | 30          | V                |
| Repetitive peak reverse-voltage             | $V_{RRM}$   | 30          | V                |
| Average forward current                     | $I_{F(AV)}$ | 1           | A                |
| Non-repetitive peak forward-surge-current * | $I_{FSM}$   | 25          | A                |
| Junction temperature                        | $T_j$       | 125         | $^\circ\text{C}$ |
| Storage temperature                         | $T_{stg}$   | -40 to +125 | $^\circ\text{C}$ |

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



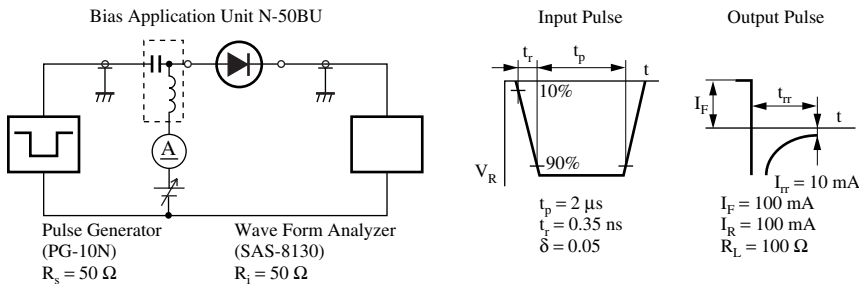
Marking Symbol: PR

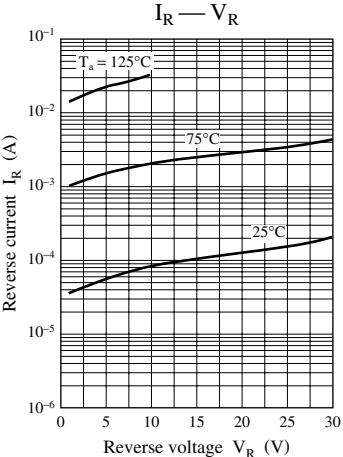
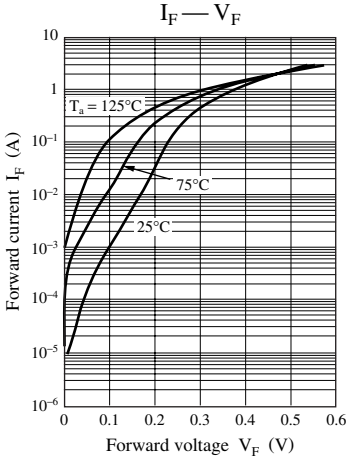
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

| Parameter               | Symbol   | Conditions                                                     | Min | Typ | Max  | Unit |
|-------------------------|----------|----------------------------------------------------------------|-----|-----|------|------|
| Reverse current (DC)    | $I_R$    | $V_R = 30$ V                                                   |     |     | 3    | mA   |
| Forward voltage (DC)    | $V_F$    | $I_F = 1$ A                                                    |     |     | 0.40 | V    |
| Terminal capacitance    | $C_t$    | $V_R = 10$ V, $f = 1$ MHz                                      |     | 50  |      | pF   |
| Reverse recovery time * | $t_{rr}$ | $I_F = I_R = 100$ mA<br>$I_{rr} = 10$ mA, $R_L = 100$ $\Omega$ |     | 15  |      | ns   |

Note) 1. Rated input/output frequency: 20 MHz

2. \*:  $t_{rr}$  measuring instrument





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