

# MA2J116 (MA116)

Silicon epitaxial planar type

For general purpose

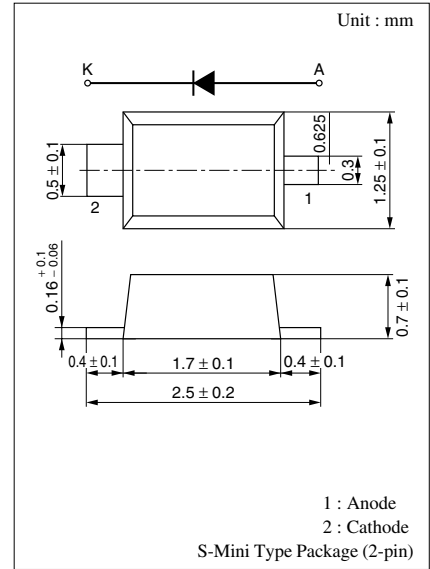
### ■ Features

- Small S-mini type package, allowing high-density mounting
- Soft recovery characteristic ( $t_{rr} = 100$  ns)

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

| Parameter                                  | Symbol      | Rating      | Unit             |
|--|-------------|-------------|------------------|
| Reverse voltage (DC)                       | $V_R$       | 40          | V                |
| Peak reverse voltage                       | $V_{RM}$    | 40          | V                |
| Average forward current                    | $I_{F(AV)}$ | 100         | mA               |
| Peak forward current                       | $I_{FM}$    | 225         | mA               |
| Non-repetitive peak forward surge current* | $I_{FSM}$   | 500         | mA               |
| Junction temperature                       | $T_j$       | 150         | $^\circ\text{C}$ |
| Storage temperature                        | $T_{stg}$   | -55 to +150 | $^\circ\text{C}$ |

Noe) \* :  $t = 1$  s



Marking Symbol: 1H

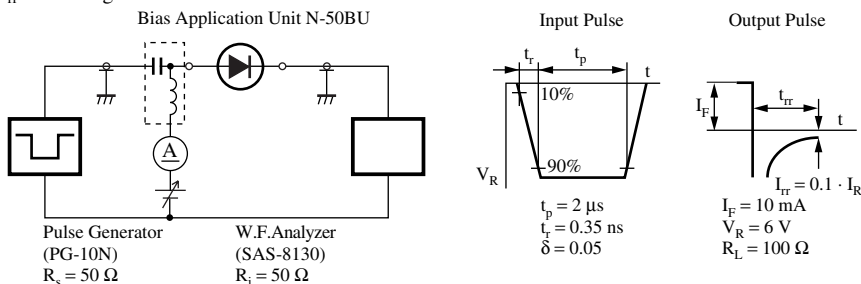
### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter                    | Symbol   | Conditions  | Min | Typ | Max | Unit          |
|------------------------------|----------|---|-----|-----|-----|---------------|
| Reverse current (DC)         | $I_{R1}$ | $V_R = 15$ V  |     |     | 5   | nA            |
|                              | $I_{R2}$ | $V_R = 40$ V  |     |     | 10  | nA            |
|                              | $I_{R3}$ | $V_R = 35$ V, $T_a = 100^\circ\text{C}$                                       |     |     | 100 | $\mu\text{A}$ |
| Forward voltage (DC)         | $V_F$    | $I_F = 100$ mA  |     |     | 1.2 | V             |
| Reverse voltage (DC)         | $V_R$    | $I_R = 100$ $\mu\text{A}$   | 35  |     |     | V             |
| Terminal capacitance         | $C_t$    | $V_R = 6$ V, $f = 1$ MHz  |     | 1.0 | 2.0 | pF            |
| Forward dynamic resistance*1 | $r_f$    | $I_F = 3$ mA, $f = 30$ MHz  |     |     | 3.6 | $\Omega$      |
| Reverse recovery time*2      | $t_{rr}$ | $I_F = 10$ mA, $V_R = 6$ V<br>$I_{rr} = 0.1 \cdot I_R$ , $R_L = 100$ $\Omega$ |     |     | 100 | ns            |

Note) 1. Rated input/output frequency: 100 MHz

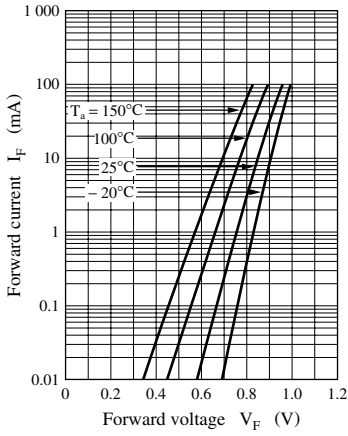
2. \*1 : YHP 4191A PF IMPEDANCE ANALYZER

\*2 :  $t_{rr}$  measuring circuit

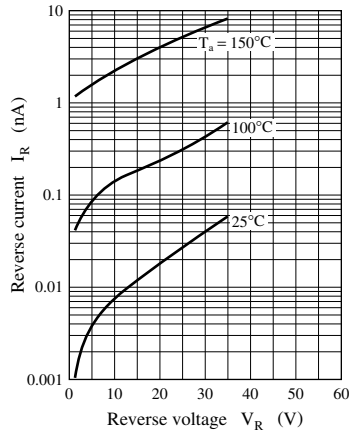


Note) The part number in the parenthesis shows conventional part number.

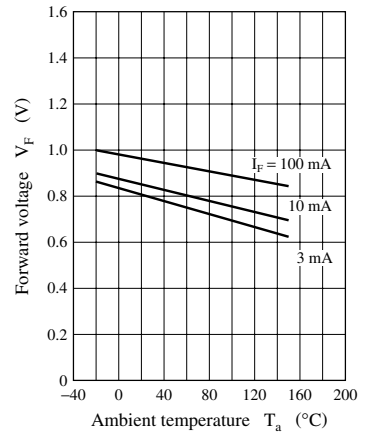
$I_F - V_F$



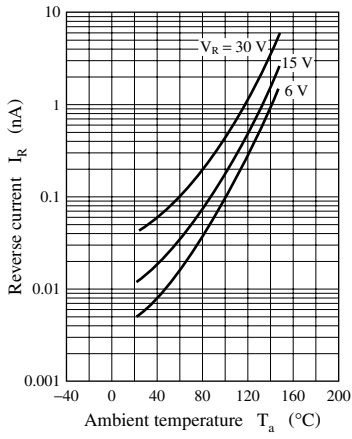
$I_R - V_R$



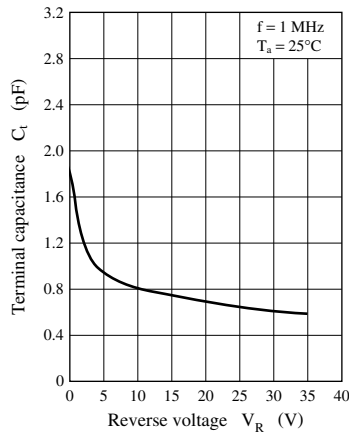
$V_F - T_a$



$I_R - T_a$



$C_t - V_R$



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