

TOSHIBA Diode Silicon Epitaxial Planar Type

HN2D01JE**Ultra High Speed Switching Application**

- The HN2D01JE is composed of 2 independent diodes.
- Low forward voltage : V_F (3) = 0.98V (typ.)
- Fast reverse recovery time : t_{rr} = 1.6ns (typ.)
- Small total capacitance : C_T = 0.5pF (typ.)

Maximum Ratings (Ta = 25°C)

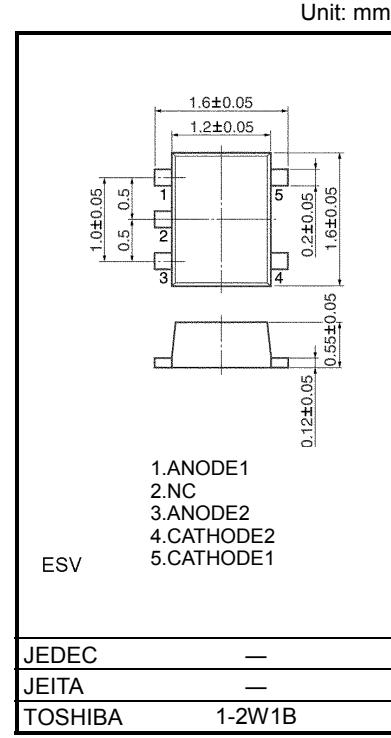
| Characteristic | Symbol | Rating | Unit |
|--------------------------------|-----------|---------|------|
| Maximum (peak) reverse Voltage | V_{RM} | 85 | V |
| Reverse voltage | V_R | 80 | V |
| Maximum (peak) forward current | I_{FM} | 200 * | mA |
| Average forward current | I_O | 100 * | mA |
| Surge current (10ms) | I_{FSM} | 1 * | A |
| Power dissipation | P | 100 ** | mW |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -55~150 | °C |

*: Unit rating; total rating = unit rating \times 1.5.

**: Total rating.

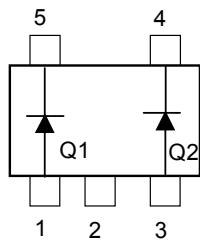
Electrical Characteristics (Ta = 25°C)

| Characteristic | Symbol | Test Circuit | Test Condition | Min | Typ. | Max | Unit |
|-----------------------|-----------|--------------|-----------------------|-----|------|------|---------|
| Forward voltage | V_F (1) | — | I_F = 1mA | — | 0.62 | — | V |
| | V_F (2) | — | I_F = 10mA | — | 0.75 | — | |
| | V_F (3) | — | I_F = 100mA | — | 0.98 | 1.20 | |
| Reverse current | I_R (1) | — | V_R = 30V | — | — | 0.1 | μ A |
| | I_R (2) | — | V_R = 80V | — | — | 0.5 | |
| Total capacitance | C_T | — | V_R = 0, f = 1MHz | — | 0.5 | — | pF |
| Reverse recovery time | t_{rr} | — | I_F = 10mA, Fig.1 | — | 1.6 | — | ns |



Weight: 0.003 mg (typ.)

Pin Assignment (Top View)



Marking

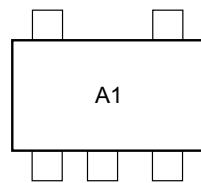
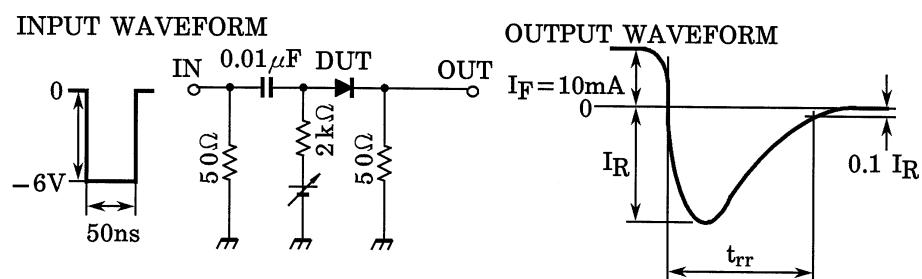
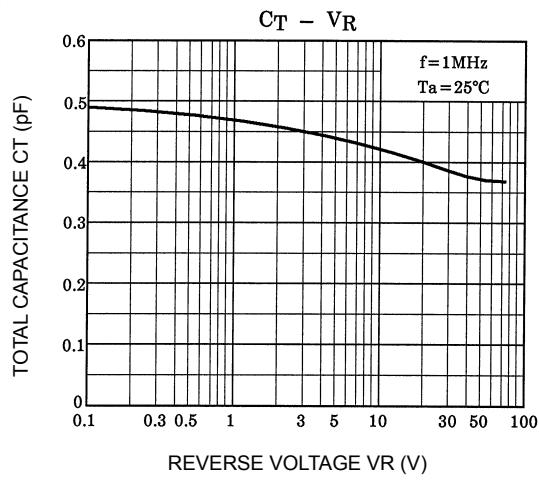
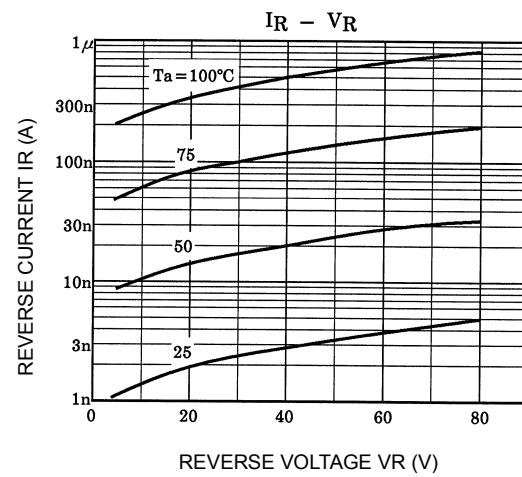
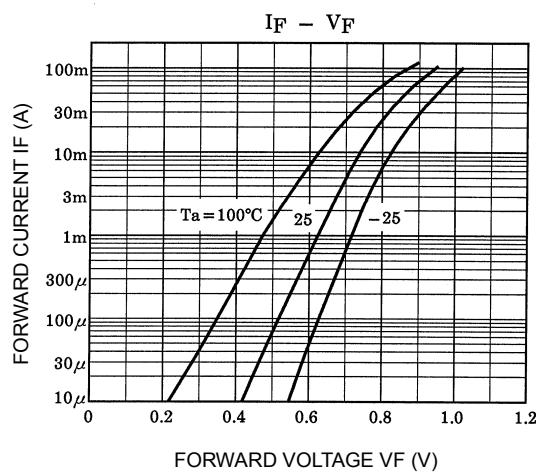


Fig. 1 Reverse Recovery Time (t_{rr}) Test Circuit





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