TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

HN2S02FU

High Speed Switching Application

• HN2S02FU is composed of 3 independent diodes.

Low forward voltage: V_{F (3)} = 0.54V (typ.)

Low reverse current: I_R = 5μA (max.)

Maximum Ratings (Ta = 25°C)

| Characteristic | Symbol | Rating | Unit | |
|--------------------------------|------------------|----------------|------|--|
| Maximum (peak) reverse Voltage | V_{RM} | 45 | V | |
| Reverse voltage | V _R | 40 | V | |
| Maximum (peak) forward current | I _{FM} | 300 * | mA | |
| Average forward current | Io | 100 * | mA | |
| Surge current (10ms) | I _{FSM} | 1 * | Α | |
| Power dissipation | Р | 200 ** | mW | |
| Junction temperature | Tj | 125 | °C | |
| Storage temperature range | T _{stg} | −55~125 | °C | |
| Operating temperature range | T _{opr} | −40~100 | °C | |

^{* :} This is maximum rating of single diode (Q1 or Q2 or Q3). In the case of using 2 ro 3 diodes, the maximum ratings per diodes is 75 % of the single diode one.

1. CATHODE 2. CATHODE 3. CATHODE 4. ANODE 5. ANODE US6 6. ANODE JEDEC JEITA TOSHIBA 1-2T1C

Weight: 6.2mg(Typ.)

Electrical Characteristics (Q1, Q2, Q3 Common, Ta = 25°C)

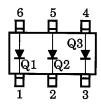
| Characteristic | Symbol | Test Circuit | Test Condition | Min | Тур. | Max | Unit |
|-------------------|--------------------|-----------------|--|-----|------|------|------|
| Forward voltage | V _{F (1)} | _ | I _F = 1mA | _ | 0.28 | _ | |
| | V _{F (2)} | _ | I _F = 10mA | | 0.36 | _ | V |
| | V _{F (3)} | _ | I _F = 100mA | _ | 0.54 | 0.60 | |
| Reverse current | I _R | _ | V _R = 40V | | | 5 | μΑ |
| Total capacitance | C _T | _ | V _R = 0, f = 1MH _z | | 18 | _ | pF |

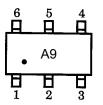
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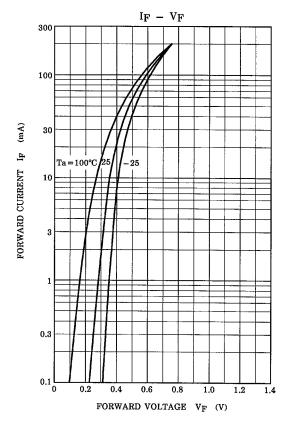
^{** :}Total rating

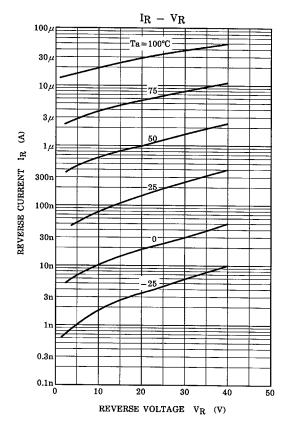
Pin Assignment (Top View)

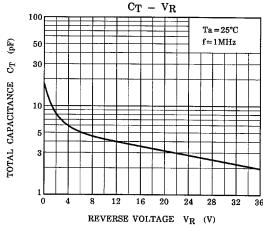
Marking

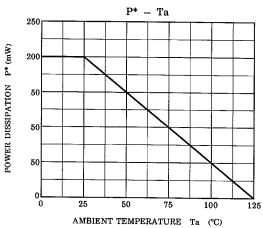












* : Total Rating

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