Unit: mm

TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

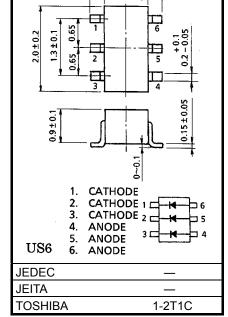
HN2S01FU

Low Voltage High Speed Switching Application

- HN2S01FU is composed of 3 independent diodes.
- Low reverse current: $V_F = 0.23V$ (typ.) @ $I_F = 5mA$

Absolute Maximum Ratings (Ta = 25°C)

| Characteristic | Symbol | Rating | Unit | |
|--------------------------------|------------------|------------|------|--|
| Maximum (peak) reverse Voltage | V_{RM} | 15 | V | |
| Reverse voltage | V _R | 10 | V | |
| Maximum (peak) forward current | I _{FM} | 200 * | 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 to 125 | °C | |
| Operating temperature range | T _{opr} | -40 to 100 | °C | |



1.25 ± 0.1

Weight: 6.2mg (typ.)

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in

temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings. Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

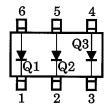
* : This is absolute maximum rating of single diode (Q1 or Q2 or Q3). In the case of using 2 ro 3 diodes, the absolute maximum ratings per diodes is 75 % of the single diode one.

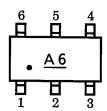
Electrical Characteristics (Q1, Q2, Q3 Common, Ta = 25°C)

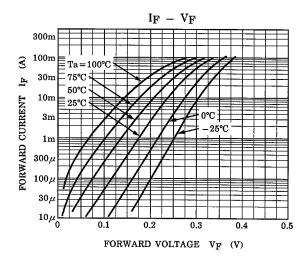
| Characteristic | Symbol | Test Circuit | Test Condition | Min | Тур. | Max | Unit | |
|-------------------|--------------------|-----------------|-------------------------|-----|------|------|------|--|
| Forward voltage | V _{F (1)} | _ | I _F = 1mA | _ | 0.18 | - | | |
| | V _{F (2)} | _ | I _F = 5mA | - | 0.23 | 0.30 | V | |
| | V _{F (3)} | _ | I _F = 100mA | _ | 0.35 | 0.50 | | |
| Reverse current | I _R | _ | V _R = 10V | _ | _ | 20 | μΑ | |
| Total capacitance | C _T | _ | $V_R = 0$, $f = 1MH_Z$ | | 20 | 40 | pF | |

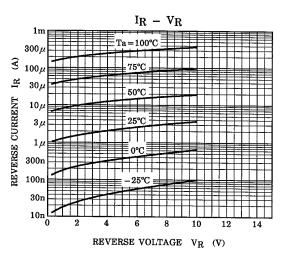
Pin Assignment (Top View)

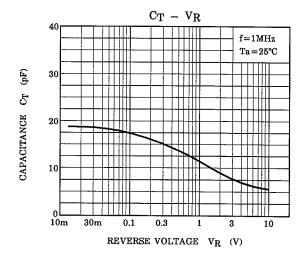
Marking

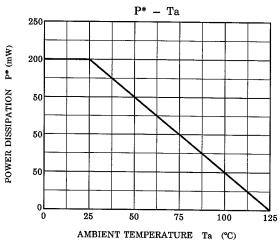












* : Total Rating

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