

TOSHIBA Diode Silicon Epitaxial Planar Type

1SS382

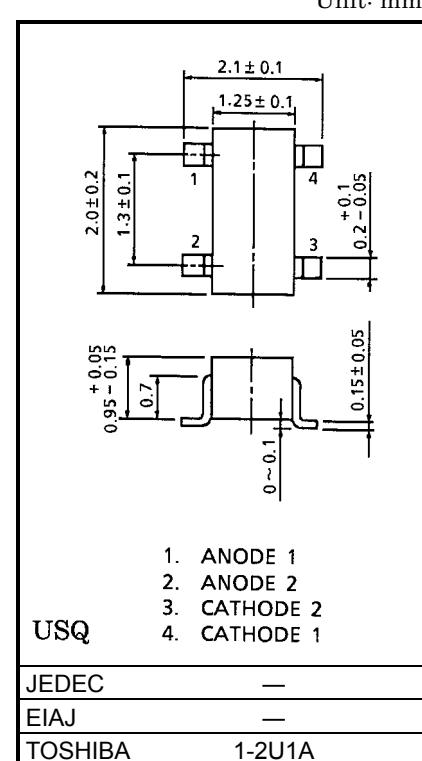
Ultra High Speed Switching Application

- Small package
- Composed of 2 independent diodes.
- Low forward voltage : VF (3) = 0.92V (typ.)
- Fast reverse recovery time: trr = 1.6ns (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} | 300 * | mA |
| Average forward current | I _O | 100 * | mA |
| Surge current (10ms) | I _{FSM} | 2 | A |
| Power dissipation | P | 100 * | mW |
| Junction temperature | T _j | 125 | °C |
| Storage temperature range | T _{stg} | -55~125 | °C |

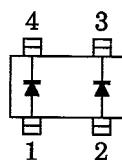
*: Unit rating. Total rating = unit rating × 1.5



Weight: 0.006g

Electrical Characteristics (Ta = 25°C)

| Characteristic | Symbol | Test Circuit | Test Condition | Min | Typ. | Max | Unit |
|-----------------------|--------------------|--------------|------------------------------|-----|------|------|------|
| Forward voltage | V _F (1) | — | I _F = 1mA | — | 0.61 | — | V |
| | V _F (2) | — | I _F = 10mA | — | 0.74 | — | V |
| | V _F (3) | — | I _F = 100mA | — | 0.92 | 1.20 | V |
| Reverse current | I _R (1) | — | V _R = 30V | — | — | 0.1 | µA |
| | I _R (2) | — | V _R = 80V | — | — | 0.5 | µA |
| Total capacitance | C _T | — | V _R = 0, f = 1MHz | — | 0.9 | 2.0 | pF |
| Reverse recovery time | trr | — | I _F = 10mA, Fig.1 | — | 1.6 | 4.0 | ns |

Pin Assignment (Top View)**Marking**