TOSHIBA Diodes for Protecting against ESD Epitaxial Planar Type

DF2S24S

Diodes for Protecting against ESD

- Two-terminal ultra-small package suitable for mounting on small spaces.
- The Zener voltage corresponds to that of to the E24 series.
- Low total capacitance: C_T = 8.5 pF (typ.)

Maximum Ratings (Ta = 25°C)

| Characteristic | Symbol | Rating | Unit |
|---------------------------|------------------|---------|------|
| Power dissipation | P* | 150 | mW |
| Junction temperature | Tj | 150 | °C |
| Storage temperature range | T _{stg} | -55~150 | °C |

^{*} Mounted on a glass-epoxy circuit board of 20 \times 20 mm, pad dimensions of 4 \times 4 mm.

Unit: mm O.52±0.03 O.52±0.03 O.10 O.10 EDEC JEITA TOSHIBA 1-1K1A

Weight: 0.0006 g (typ.)

Electrical Characteristics (Ta = 25°C)

| Characteristic | Symbol | Test Circuit | Test Condition | Min | Тур. | Max | Unit |
|-------------------|----------------|-----------------|---------------------------------|------|------|------|------|
| Zener voltage | VZ | _ | I _Z = 5 mA | 22.8 | 24 | 25.6 | V |
| Dynamic impedance | Z _Z | _ | I _Z = 5 mA | _ | _ | 70 | Ω |
| Reverse current | I _R | _ | V _R = 19 V | _ | _ | 0.5 | μΑ |
| Total capacitance | Ст | _ | V _R = 0 V, f = 1 MHz | _ | 8.5 | _ | pF |

Guaranteed Level of ESD Immunity

| Test Condition | ESD Immunity Level |
|-------------------------------------|--------------------|
| IEC61000-4-2 (contact discharge) | ± 10 kV |

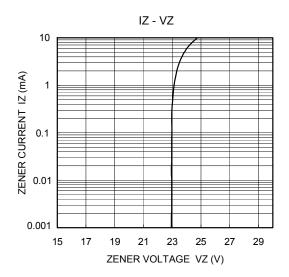
Criterion: No damage to device elements

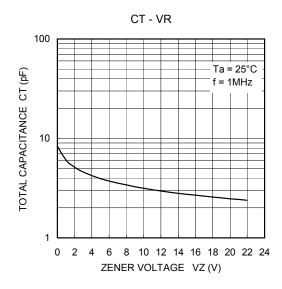
Marking

Equivalent Circuit (Top View)









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