TOSHIBA Diodes for Protecting against ESD Epitaxial Planar Type

DF3A8.2LFU

Diodes for Protecting against ESD

- The mounting of two devices on an ultra-compact package allows the number of parts and the mounting cost to be reduced.
- · The zener voltage corresponds to the E24 Series.
- Low Terminal capacitance (between Cathode and Anode)
 : C_T = 5.0 pF (typ.)

Maximum Ratings (Ta = 25°C)

| Characteristics | Symbol | Rating | Unit |
|---------------------------|------------------|-----------|------|
| Power dissipation | Р | 100 | mW |
| Junction temperature | Tj | 125 | °C |
| Storage temperature range | T _{stg} | −55 ~ 125 | °C |

Unit: mm 2.1±0.1 1. CATHODE1 2. CATHODE2 3. ANODE USM JEDEC JEITA TOSHIBA 1-2P1A

Weight: 0.006 g (typ.)

Electrical Characteristics (Ta = 25°C)

| Characteristics | Symbol | Test Condition | Min | Тур. | Max | Unit |
|--|-----------------|------------------------|-----|------|-----|------|
| Zener voltage | V_Z | $I_Z = 5 \text{ mA}$ | 7.8 | 8.2 | 8.6 | V |
| Dynamic impedance | Z _Z | $I_Z = 5 \text{ mA}$ | _ | _ | 60 | Ω |
| Knee dynamic impedance | Z _{ZK} | $I_Z = 0.5 \text{ mA}$ | _ | _ | 100 | Ω |
| Reverse current | I _R | V _R = 5 V | _ | _ | 0.5 | μΑ |
| Terminal capacitance (between Cathode and Anode) | C _T | $V_R = 0 V, f = 1 MHz$ | | 5.0 | _ | pF |

Guaranteed Level of ESD Immunity

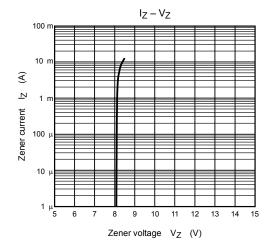
| Test Condition | ESD Immunity Level |
|-------------------------------------|--------------------|
| IEC61000-4-2 (Contact discharge) | ± 6kV |

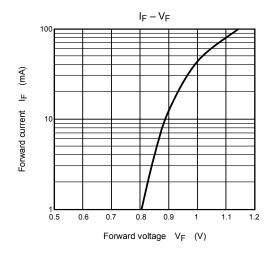
Criterion: No damage to device elements

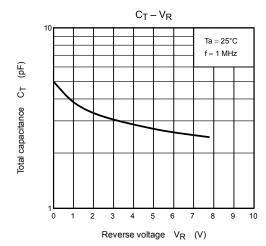
Marking Equivalent Circuit (top view)











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