imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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Contact us

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TOSHIBA Diodes for Protecting against ESD

DF3A6.8UFU

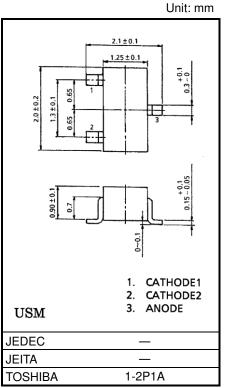
ESD Protection Diode

* This device is intended for electrostatic discharge (ESD) protection and should not be used for any other purpose, including the constant-voltage diode applications.

Abusolute Maximum Ratings (Ta = 25°C)

| Characteristics | Symbol | Rating | Unit |
|---------------------------|------------------|------------|------|
| Power dissipation | Р | 100 | mW |
| Junction temperature | Тј | 150 | °C |
| Storage temperature range | T _{stg} | -55 to 150 | °C |

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.



Weight: 6.0 mg (typ.)

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).

Electrical Characteristics (Ta = 25°C)

| Characteristics | Symbol | Test Condition | Min | Тур. | Max | Unit |
|--|--------|---------------------------------|-----|------|-----|------|
| Reverse stand-off voltage | VRWM | - | _ | _ | 5.0 | V |
| Reverse voltage | VR | I _R = 1 mA | 5.3 | 6.8 | _ | V |
| Reverse current | IR | V _{RWM} = 5 V | _ | _ | 0.5 | μA |
| Total capacitance (between Cathode and Anode) | CT | V _R = 0 V, f = 1 MHz | _ | _ | 2.5 | pF |
| Forward stand-off voltage | VF | I _F = 1 mA | _ | 25 | _ | V |

Marking



Equivalent Circuit (top view)



Start of commercial production 2007-11

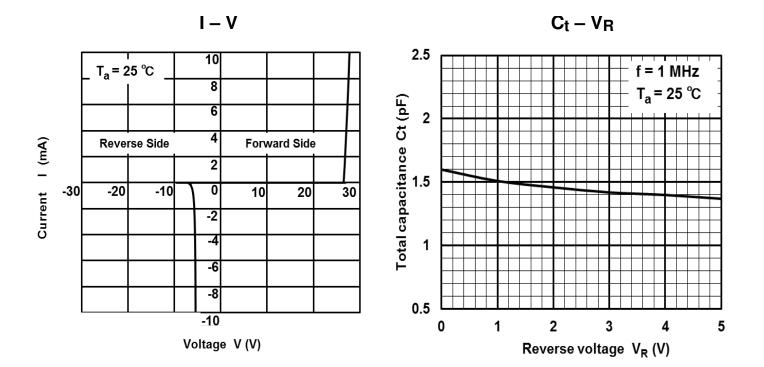
2016-09-21

Guaranteed Level of ESD Immunity

| Test Condition | ESD Immunity Level |
|-------------------------------------|--------------------|
| IEC61000-4-2 (Contact discharge) | ±8kV |

Criterion: No damage to device elements

TOSHIBA



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