Unit: mm

#### TOSHIBA Diodes For Protecting Against ESD

# DF3A6.8F

Product for Use Only as Protection against Electrostatic Discharge (ESD)

\*This product is for protection against electrostatic discharge (ESD) only and is not intended for any other usage, including without limitation, the constant voltage diode application.

• The mounting of two devices on an ultra-compact package allows the number of parts and the mounting cost to be reduced.

#### Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Power dissipation	Р	150	mW
Junction temperature	Тј	150	°C
Storage temperature range	T <sub>stg</sub>	-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.

2.9±0.2 A з S 0.95 0.95 0.4<sup>+0.1</sup> -0.05 (\$.2@A 1-0-2 20.05 ± 0.05 1. Cathodel 2. Cathode2 3. Anode S-MINI JEDEC JEITA \_\_\_\_ TOSHIBA 2-3F1S

Weight: 12 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).

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Zener voltage	Vz	Iz = 5 mA	6.4	6.8	7.2	V
Dynamic impedance	ZZ	Iz = 5 mA	_	3	25	Ω
Reverse current	IR	V <sub>R</sub> = 5 V	_	_	0.5	μA
Terminal capacitance (between Cathode and Anode)	Ст	V <sub>R</sub> = 0 V, f = 1 MHz	_	45	_	pF

#### Electrical Characteristics (Ta = 25°C)

Start of commercial production 2005-12

## **Guaranteed Level of ESD Immunity**

Test Condition	ESD Immunity Level
IEC61000-4-2 (Contact discharge)	± 30 kV

Criterion: No damage to device elements

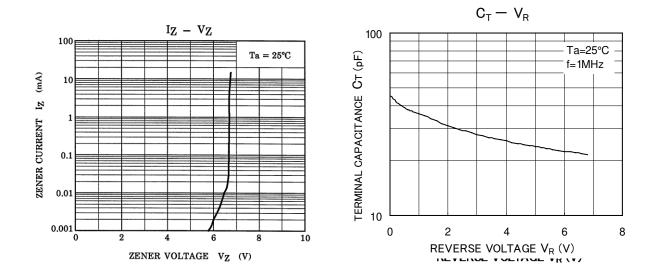
#### Marking

## Equivalent Circuit (Top View)





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