**TOSHIBA Diodes For Protecting Against ESD** 

# DF3A6.2FV

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.
- Because two devices are mounted on an ultra compact package, it is possible to allow reducing the number of the parts and the mounting cost

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

Characteristics	Symbol	Rating	Unit
Power dissipation	P*	150	mW
Junction temperature	Tj	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.

Unit: mm

1.2±0.05

0.8±0.05

0.8±0.05

1.CATHODE1

2.CATHODE2

3.ANODE

JEDEC

JEITA

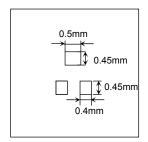
TOSHIBA

1-1Q1B

Weight: 0.0015 g (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).

\*: Mounted on FR4 board (25.4 mm × 25.4 mm × 1.6 mmt)



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

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Zener voltage	VZ	$I_Z = 5 \text{ mA}$	5.8	6.2	6.6	V
Dynamic impedance	Z <sub>Z</sub>	I <sub>Z</sub> = 5 mA	_	_	30	Ω
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 3 V	_	_	1	μΑ
Terminal capacitance (between Cathode and Anode)	C <sub>T</sub>	V <sub>R</sub> = 0, f = 1MHz	_	55	_	pF

Start of commercial production 2003-06

## **Guaranteed Level of ESD Immunity**

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

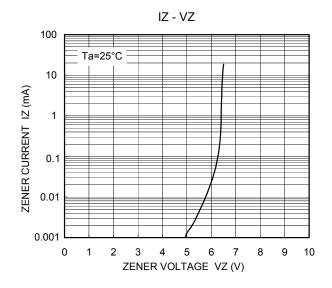
Criterion: No damage to device elements

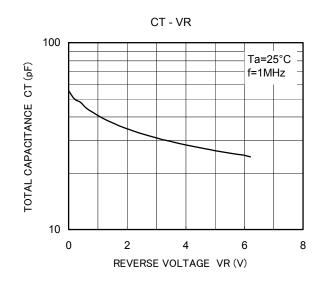
### Marking

# Equivalent Circuit (top view)









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DF3A6.2FV,L3F



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