Unit: mm

TOSHIBA Diodes for Protecting against ESD

# DF5A6.2FU

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

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

Characteristic	Symbol	Rating	Unit
Power dissipation	Р	200	mW
Junction temperature	Tj	125	°C
Storage temperature range	T <sub>stg</sub>	−55 to 125	°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.

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).

# 1.CATHODE 1 2. ANODE 3. CATHODE3 4. CATHODE4 USV 5. CATHODE4 JEDEC JEITA TOSHIBA 1-2V1B

Weight: 0.0062 g (typ.)

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

Characteristic	Symbol	Test Condition	Min	Тур.	Max	Unit
Zener voltage	VZ	I <sub>Z</sub> = 5 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	_	_	1.0	μΑ
Terminal capacitance (between Cathode and Anode)	C <sub>T</sub>	V <sub>R</sub> = 0, f = 1 MHz		55	_	pF

### **Guaranteed Level of ESD Immunity**

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

Criterion: No damage to device elements

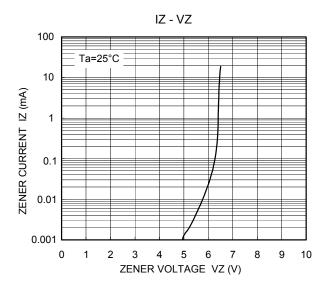
Start of commercial production 2000-11

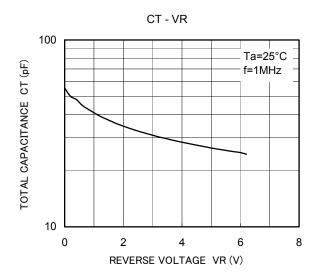
## Marking

# **Equivalent Circuit (Top View)**









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