TOSHIBA Diodes For Protecting Against ESD Epitaxial Planar Type

DF3A6.2CT

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.

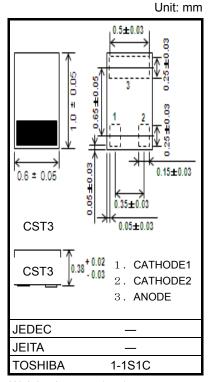
 The mounting of two devices on an ultra-compact package allows the number of parts and the mounting cost to be reduced.

Absolute Maximum Ratings (Ta = 25°C)

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

^{*:} Mounted on FR4 board (10 mm \times 10 mm \times 1 mm(t))

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: 0.75 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
Zener voltage	V_Z	I _Z = 5 mA	5.8	6.2	6.6	V
Dynamic impedance	Z _Z	I _Z = 5 mA	_	_	30	Ω
Reverse current	I _R	V _R = 3 V	_	_	1.0	μΑ
Terminal capacitance (between Cathode and Anode)	C _T	V _R = 0 V, f = 1 MHz	ı	55	_	pF

Guaranteed Level of ESD Immunity

Test Condition	ESD Immunity Level
IEC61000-4-2 (Contact discharge)	$\pm30~\text{kV}$

Criterion: No damage to device elements

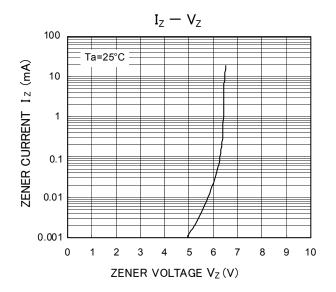
Marking

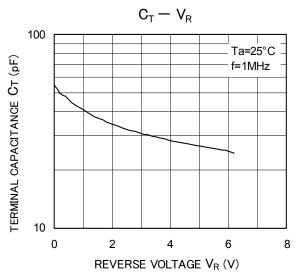
Equivalent Circuit (Top View)





2





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4