TOSHIBA Diodes for Protecting against ESD Epitaxial Planar Type

DF3A6.2LFE

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.
- Low Terminal capacitance: $C_T = 6.5 pF$ (typ.)

Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating Unit
Power dissipation	Р	100 mW
Junction temperature	Tj	125 °C
Storage temperature range	T _{stg}	-55~125 °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).

Unit: mm 1.6 ± 0.1 0.85 ± 0.1 CATHODE1 CATHODE2 ANODE ÉŚM

Weight: 0.0023 g (typ.)

1-2SA1A

JEDEC

JEITA

TOSHIBA

Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Zener voltage	Vz	$I_Z = 5 \text{ mA}$	5.9	6.2	6.5	V
Dynamic impedance	Z_{Z}	$I_Z = 5 \text{ mA}$	_	_	50	Ω
Reverse current	IR	V _R = 5 V	_	_	2.5	μΑ
Terminal capacitance (between Cathode and Anode)	Ŭc _T	V _R = 0 V, f = 1 MHz	_	6.5	_	pF

Guaranteed Level of ESD Immunity

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

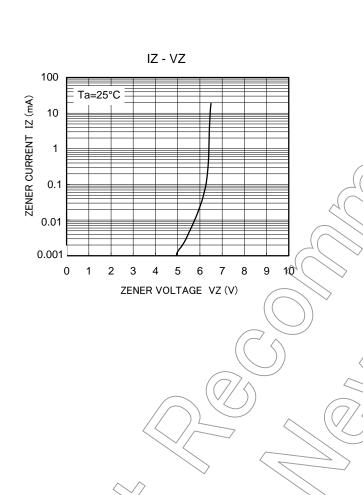
Criterion: No damage to device elements

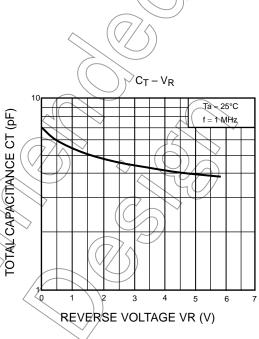
Marking

Equivalent Circuit (top view)









2

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3