TOSHIBA Diodes for Protecting against ESD Epitaxial Planar Type

DF2S6.2S

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.
- 2 terminal ultra small package suitable for mounting on small space.

Absolute Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating
Power dissipation	P*	150* mW
Junction temperature	Tj	150 °C
Storage temperature range	T _{stg}	-55~150 °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.

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

0.52±0.03

0.52±0.03

0.6±0.05

DEDEC

JEITA

TOSHIBA

1-1K1A

Weight: 0.0011 g (typ.)

*: Mounted on a glass-epoxy circuit board of 20 × 20 mm, pad dimension of 4 × 4 mm.

Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Zener voltage	V _Z	\rightarrow	I _Z = 5 mA	5.8	6.2	6.6	V
Dynamic impedance	∠Z _Z	_	I _Z = 5 mA	_	_	30	Ω
Reverse current	R	_	V _R = 5 V		_	2.5	μΑ
Total capacitance	(c)	_	V _R = 0 V, f = 1 MHz		32	_	pF

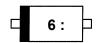
Guaranteed Level of ESD Immunity

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

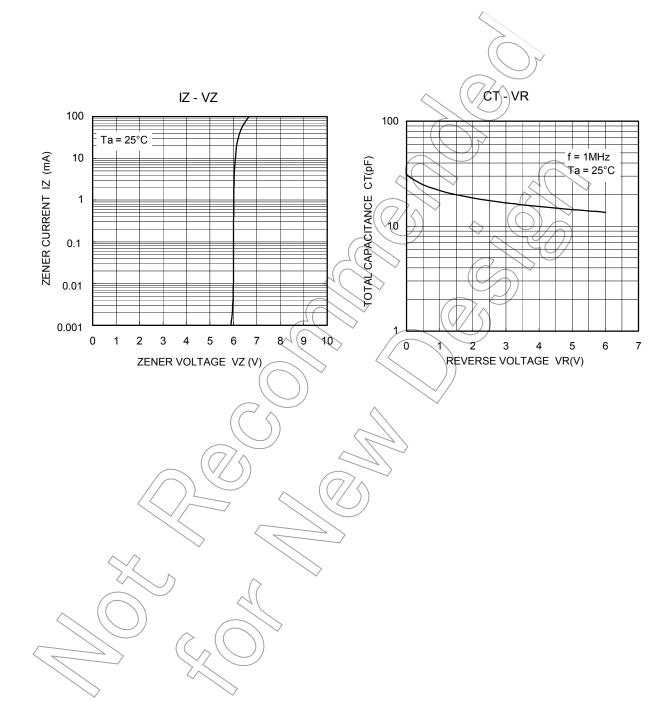
Criterion: No damage to device elements

Marking

Equivalent Circuit (Top View)







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