TOSHIBA Diodes for Protecting against ESD

DF5A3.6JE

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	100	MW
Junction temperature	Tj	150	°C
Storage temperature range	T _{stg}	−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.

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.CATHODE1 2.ANODE 3.CATHODE3 5.CATHODE4 JEDEC JEITA TOSHIBA 1.6±0.05 1.2±0.05 1

Weight: 0.003 g (typ.)

Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Condition	Min	Тур.	Max	Unit
Zener voltage	VZ	I _Z = 5 mA	3.4	3.6	3.8	V
Dynamic impedance	Z _Z	I _Z = 5 mA	_	_	130	Ω
Reverse current	I _R	V _R = 1 V	_	_	10	μΑ
Terminal capacitance (between Cathode and Anode)	C _T	V _R = 0 V, f = 1 MHz	_	110	_	pF

Guaranteed Level of ESD Immunity

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

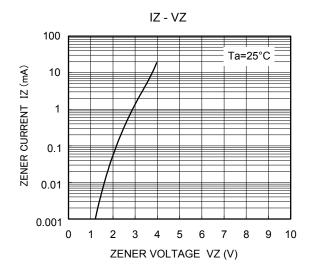
Criterion: No damage to device elements

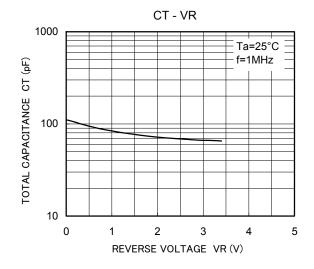
Marking

Equivalent Circuit (Top View)









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