Unit: mm

TOSHIBA Diodes for Protecting against ESD Epitaxial Planar Type

DF3A6.8LFV

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 in an ultra-compact package enables a reduction in the number of parts and in the mounting cost.
- Low terminal capacitance: C_T = 6.0 pF (typ.)

Absolute Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	Р	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.

1. CATHODE1
2. CATHODE2
3. ANODE

JEDEC

JEITA

TOSHIBA

1.2±0.05

0.8±0.06

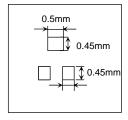
1. CATHODE2

3. ANODE

Weight: 1.5 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).

*: Mounted on an FR4 board (25.4 mm × 25.4 mm × 1.6 mmt)



Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Condition	Min	Тур.	Max	Unit
Zener voltage	V_Z	$I_Z = 5 \text{ mA}$	6.5	6.8	7.1	V
Dynamic impedance	Z _Z	I _Z = 5 mA	_	_	50	Ω
Reverse current	I _R	V _R = 5 V	_	_	0.5	μА
Terminal capacitance (between cathode and anode)	C _T	V _R = 0 V, f = 1 MHz	_	6.0	_	pF

Guaranteed Level of ESD Immunity

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

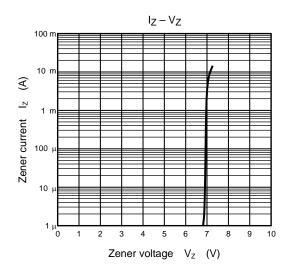
Criterion: No damage to device elements

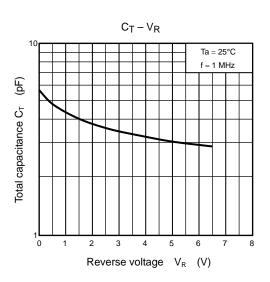
Marking

Equivalent Circuit (top view)









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- Поставка более 17-ти миллионов наименований электронных компонентов;
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- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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