

TOSHIBA Diodes for Protecting against ESD Epitaxial Planar Type

DF3A8.2LFV

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: $C_T = 5.0$ pF (typ.)

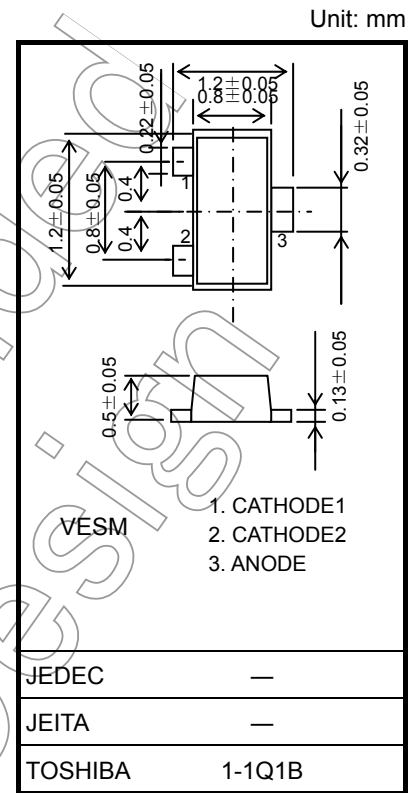
Absolute Maximum Ratings (Ta = 25°C)

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

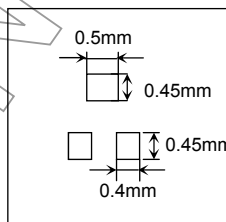
Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) 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).

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



Weight: 0.0015 g (typ.)



Electrical Characteristics (Ta = 25°C)

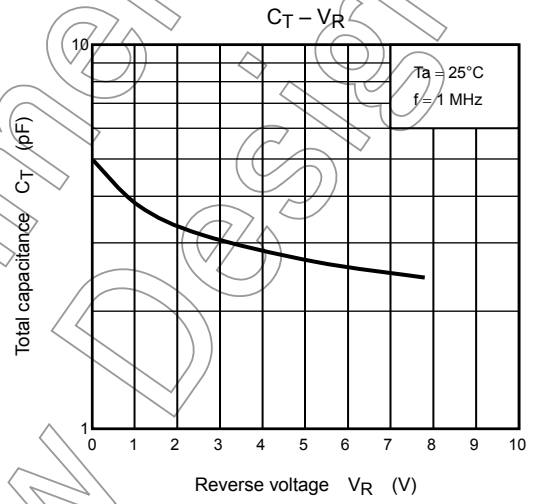
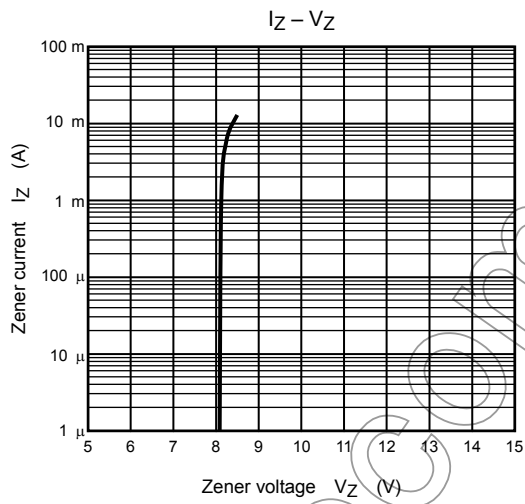
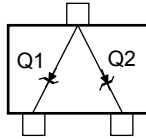
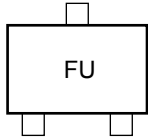
Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Zener voltage	V _Z	I _Z = 5 mA	7.8	8.2	8.6	V
Dynamic impedance	Z _Z	I _Z = 5 mA	—	—	60	Ω
Reverse current	I _R	V _R = 5 V	—	—	0.5	μA
Terminal capacitance (between Cathode and Anode)	C _T	V _R = 0 V, f = 1 MHz	—	5.0	—	pF

Guaranteed Level of ESD Immunity

Test Condition	ESD Immunity Level
IEC61000-4-2 (contact discharge)	± 6 kV

Criterion: No damage to device elements

Marking Equivalent Circuit (top view)



Not Recommended for New Design

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