

TOSHIBA Diode Silicon Epitaxial Planar Type

**015DZ5.1**

## Constant-Voltage Regulation Applications

- Small package

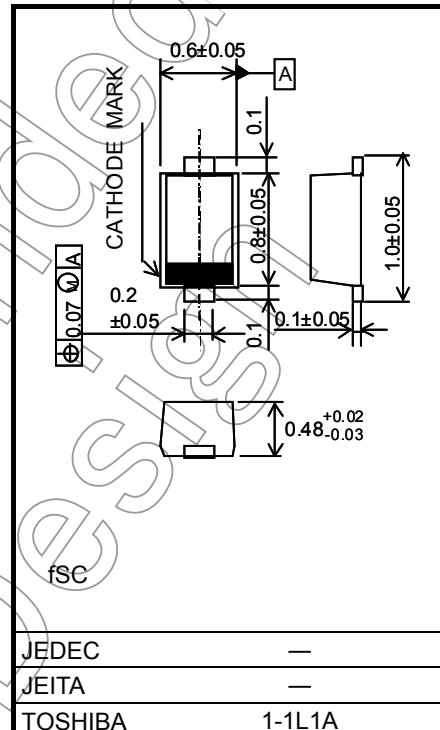
**Absolute Maximum Ratings (Ta = 25°C)**

Characteristic	Symbol	Rating	Unit
Power dissipation	P	150*	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature range	T <sub>stg</sub>	-55 to 150	°C

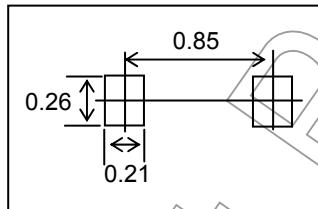
\*: Mounted on a glass epoxy circuit board of 20 mm × 20 mm, pad dimension of 4 mm × 4 mm.

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.

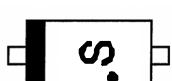
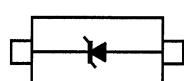
Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc.).

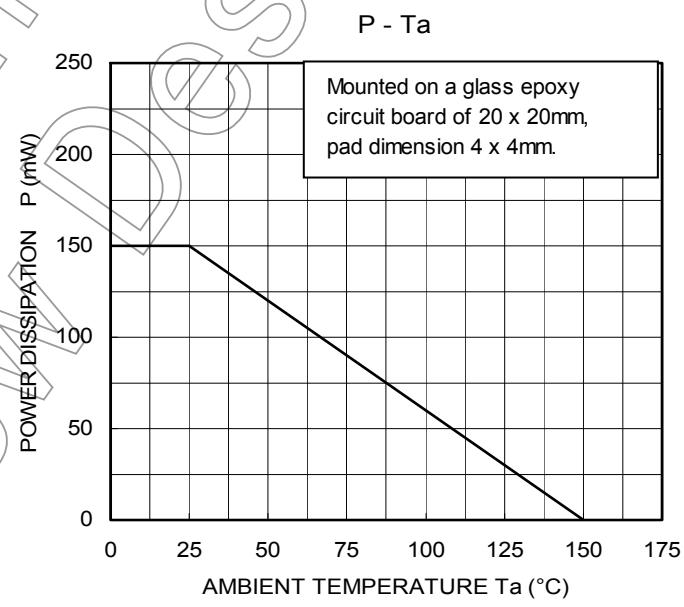
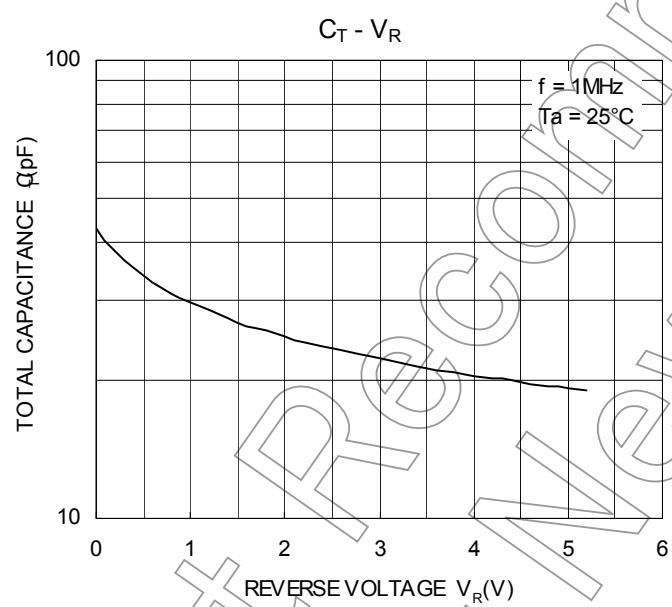
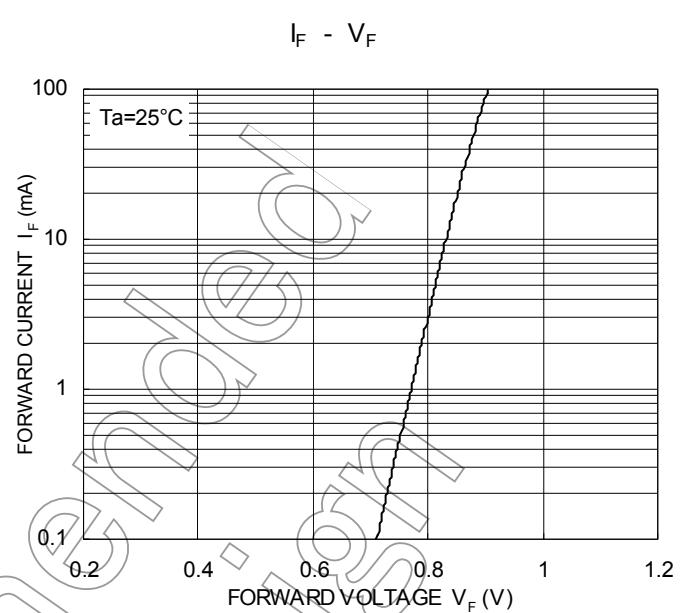
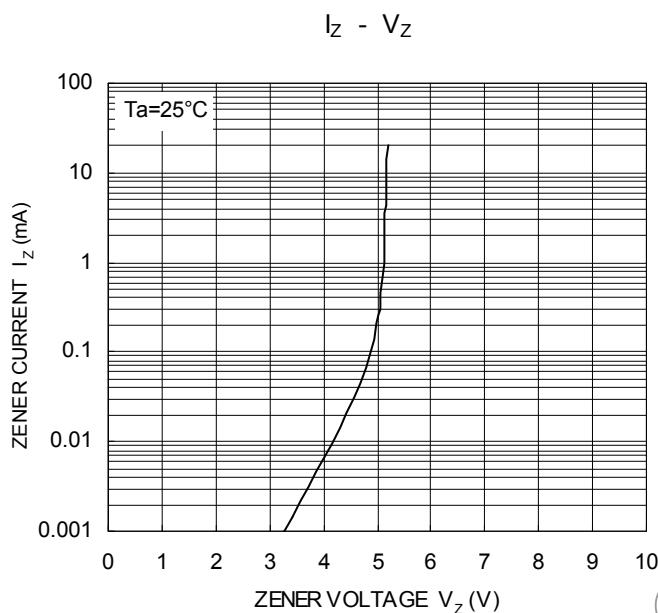


Weight: 0.6 mg (typ.)

**Pad Dimensions (Reference)****Electrical Characteristics (Ta = 25°C)**

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Zener voltage	V <sub>Z</sub>	I <sub>Z</sub> = 5 mA	4.97	—	5.24	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 1.5 V	—	—	1	μA
Dynamic Impedance	Z <sub>Z</sub>	I <sub>Z</sub> = 5 mA	—	—	70	Ω
Knee Dynamic Impedance	Z <sub>ZK</sub>	I <sub>Z</sub> = 0.5 mA	—	—	500	Ω

**Marking****Equivalent Circuit (Top View)**



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