

TOSHIBA Diodes for Protecting against ESD

DF2B6.8CT

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.

Unit in mm

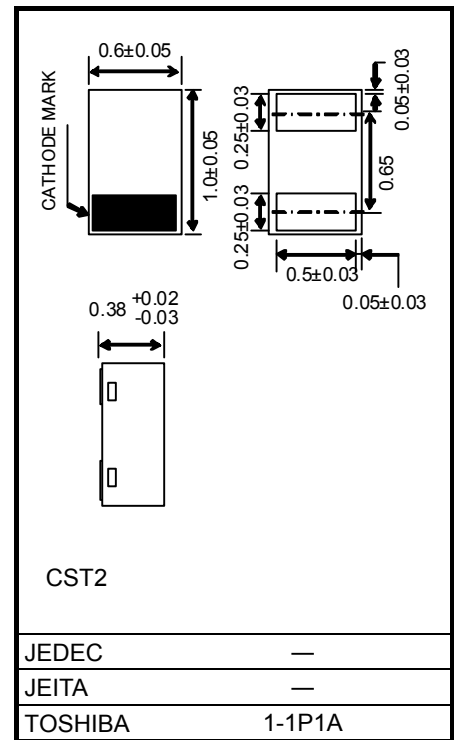
Absolute Maximum Ratings (Ta = 25°C)

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

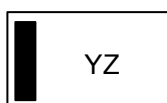


Weight: 0.7 mg (typ.)

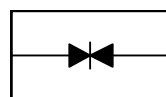
Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse stand-off voltage	V _{RWM}	—	—	—	5.0	V
Reverse breakdown voltage	V _R	I _R = 1 mA	5.8	6.8	7.8	V
Reverse current	I _R	V _{RWM} = 5 V	—	—	0.5	μA
Total capacitance	C _T	V _R = 0 V, f = 1 MHz	—	15	—	pF

Marking



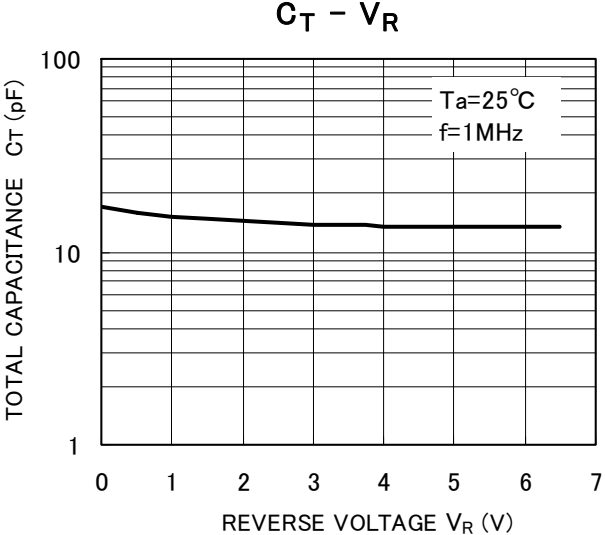
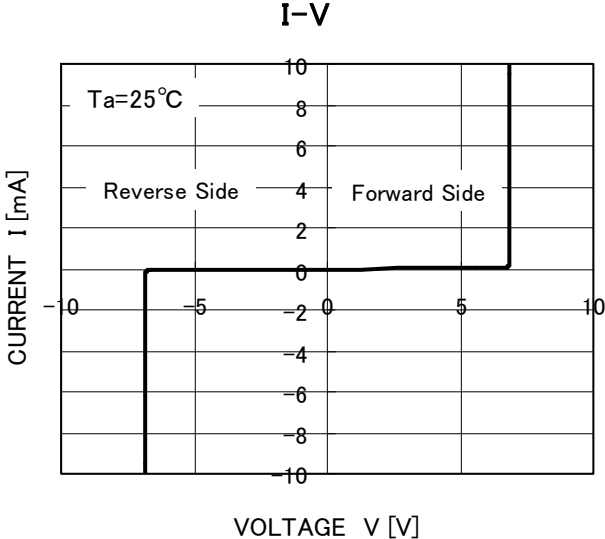
Equivalent Circuit (top view)



Guaranteed Level of ESD Immunity

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

Criterion: No damage to device elements



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