

TOSHIBA Zener Diode Silicon Epitaxial Type

U02Z300N

Unit: mm

Constant Voltage Regulation

- Suitable for compact assembly due to small surface-mount package
- Types of 10V zener voltage range are prepared as follows

Absolute Maximum Ratings (Ta=25°C)

Characteristics	Symbol	Rating	Unit
Power dissipation	P*	200 (Note 1)	mW
Junction temperature	T _j	150	°C
Storage temperature Range	T _{stg}	-55~150	°C

Note 1: Ta = 50°C

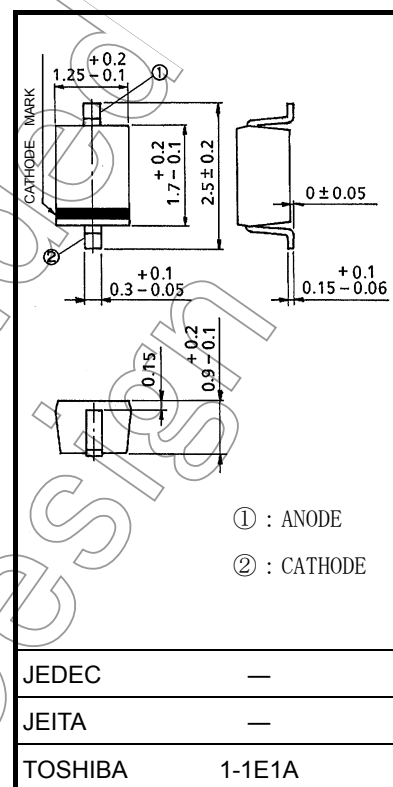
Device mounted on a glass-epoxy board

Board size: 20 mm × 20 mm

Soldering size: 4.0 mm × 4.0 mm

Note 2: 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.)



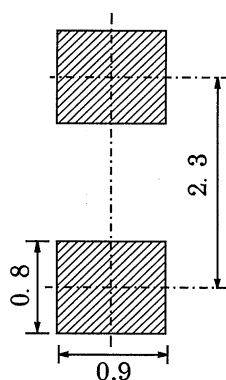
Weight: 0.004 g (Typ.)

Electrical Characteristics (Ta= 25°C)

Type	Zener Characteristics					Temperature Coefficient of Zener Voltage α_T (mV/°C)		Forward Voltage V_F (V)	Measurement Current (mA)	Reverse Current I_R (μA)	Measurement Voltage V_R (V)
	Zener Voltage V_Z (V)			Zener Impedance r_d (kΩ)	Measurement Current I_Z (mA)						
	Min.	Typ.	Max.			Typ.	Typ	Max.	Max.		
U-0-2-Z-3-0-0-N	270	300	330	10	0.1	240	400	1.2	10	1	240
U 0 2 Z 3 0 0 N - L	270	280	290	10	0.1	220	360	1.2	10	1	240
U 0 2 Z 3 0 0 N - X	280	290	300	10	0.1	230	370	1.2	10	1	240
U 0 2 Z 3 0 0 N - Y	290	300	310	10	0.1	240	380	1.2	10	1	240
U 0 2 Z 3 0 0 N - Z	300	310	320	10	0.1	250	390	1.2	10	1	240
U 0 2 Z 3 0 0 N - H	310	320	330	10	0.1	260	400	1.2	10	1	240

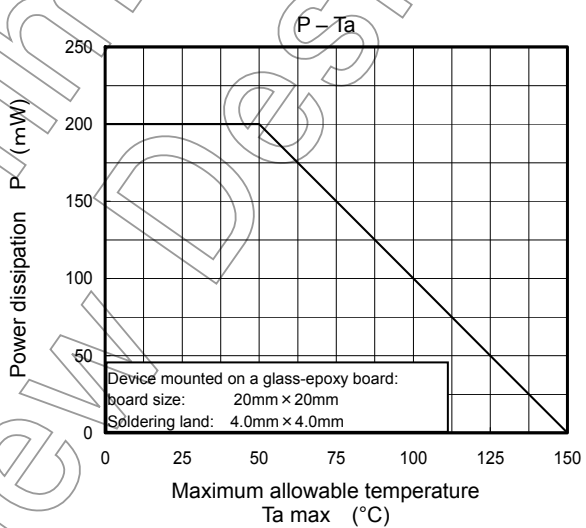
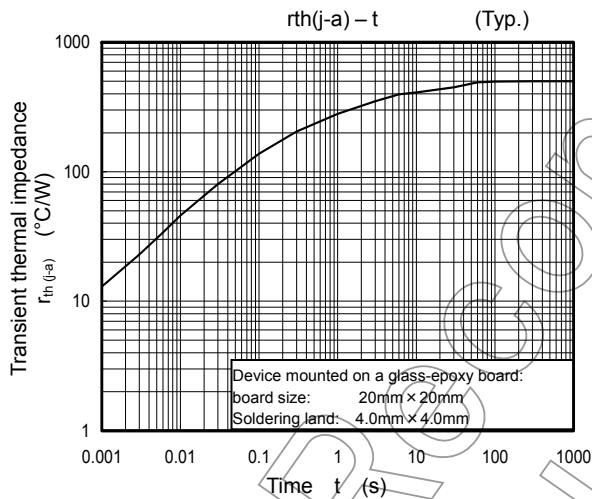
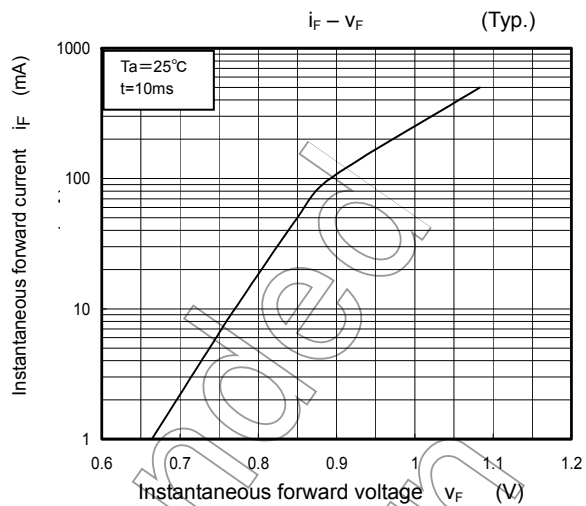
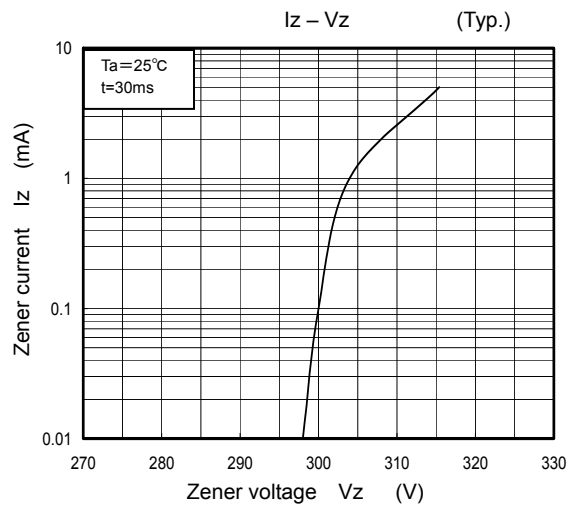
Standard Soldering Pad (Unit in mm)

Marking



Symbol	Device Type
CS	U02Z300N
CL	U02Z300N-L
CX	U02Z300N-X
CY	U02Z300N-Y
CZ	U02Z300N-Z
CH	U02Z300N-H

Not Recommended for New Design



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20070701-EN

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