

# Zener diode

## TDZ10

### ●Applications

Constant voltage control

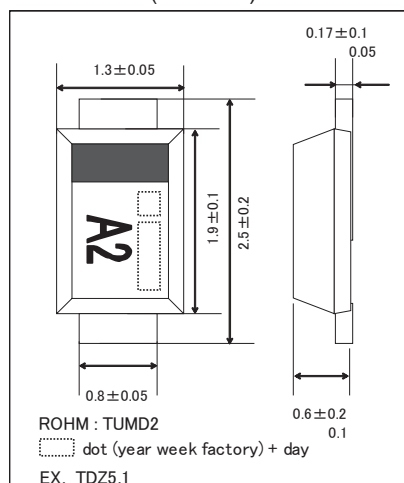
### ●Features

- 1) Small mold type. (TUMD2)
- 2) High reliability.
- 3) Can be mounted automatically, using chip mounter.

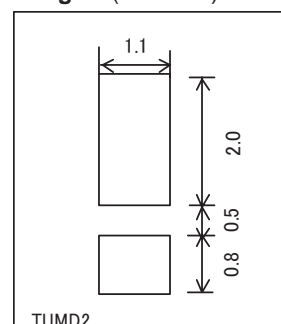
### ●Construction

Silicon epitaxial planar

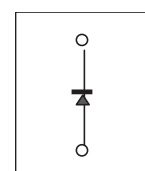
### ●Dimensions (Unit : mm)



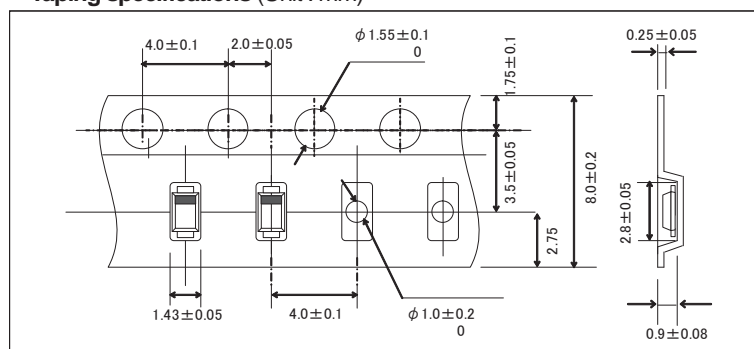
### ●Land size figure (Unit : mm)



### ●Structure



### ●Taping specifications (Unit : mm)



### ●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power dissipation	P	500	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to 150	°C
Operating resistance	T <sub>opr</sub>	-55 to 150	°C

## Diodes

## ●Electrical characteristics (Ta=25°C)

TYP.	Symbol				
	Zener voltage : Vz(V)			Reverse current : IR(μA)	
	MIN.	MAX.	Iz(mA)	MAX.	VR(V)
TDZ 5.1	4.60	5.60	10	10	1.5
TDZ 5.6	5.10	6.10	10	10	2.5
TDZ 6.2	5.60	6.80	10	10	3.0
TDZ 6.8	6.20	7.40	10	10	3.5
TDZ 7.5	6.80	8.30	10	10	4.5
TDZ 8.2	7.40	9.00	10	10	4.9
TDZ 9.1	8.20	10.00	10	10	5.5
TDZ 10	9.00	11.00	10	10	6.0
TDZ 11	9.90	12.10	10	10	7.0
TDZ 12	10.80	13.20	10	10	8.0
TDZ 13	11.70	14.30	10	10	9.0
TDZ 15	13.50	16.50	10	10	10.0
TDZ 16	14.40	17.60	10	10	11.0
TDZ 18	16.20	19.80	10	10	12.0
TDZ 20	18.00	22.00	10	10	14.0
TDZ 22	19.80	24.20	10	10	15.0
TDZ 24	21.60	26.40	10	10	16.0
TDZ 27	24.30	29.70	10	10	19.0
TDZ 30	27.00	33.00	10	10	21.0

( 1 )The zener voltage(Vz) is measured 40ms after power is supplied.

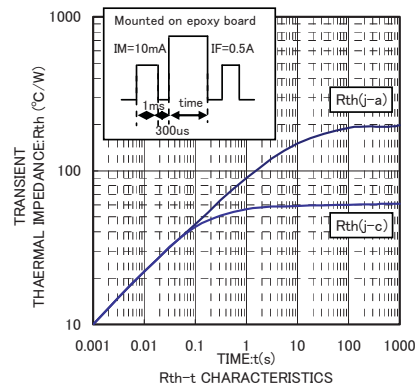
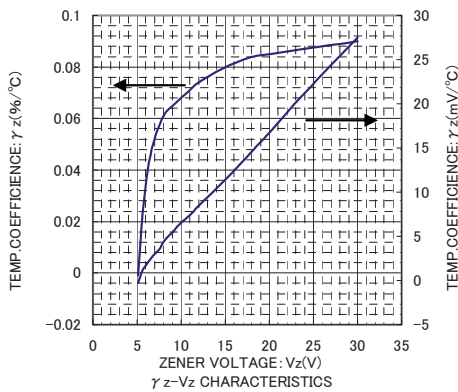
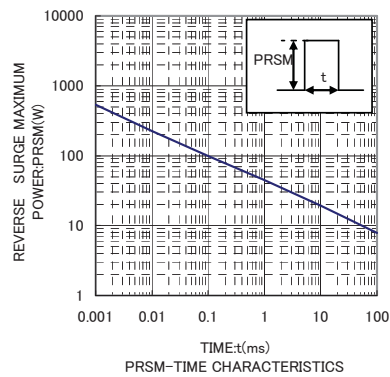
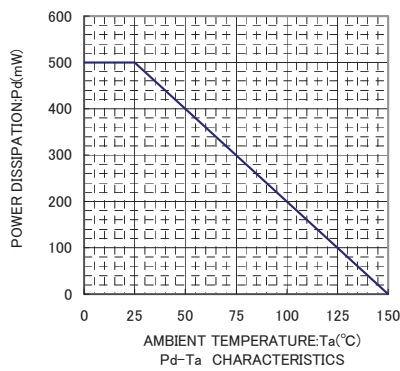
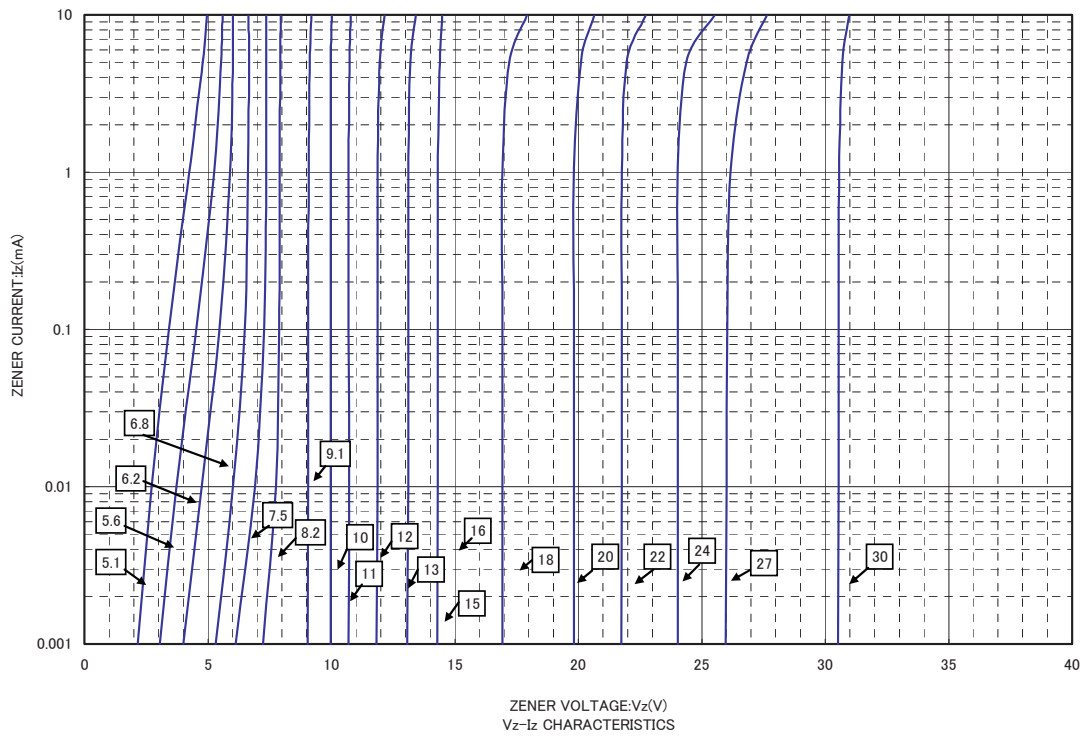
( 2 )The operating resistances(Zz,Zzk) are measured by superimposing a minute alternating current on the regulated current(Iz)

## ●Type No.

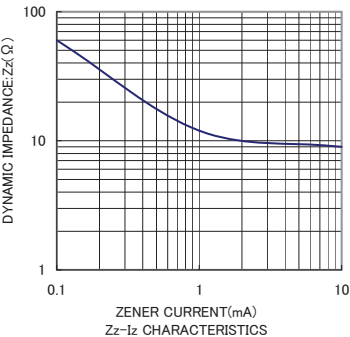
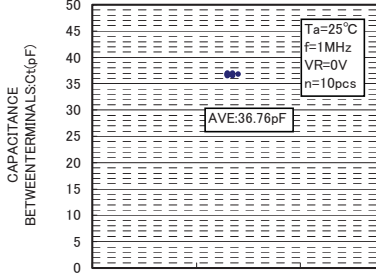
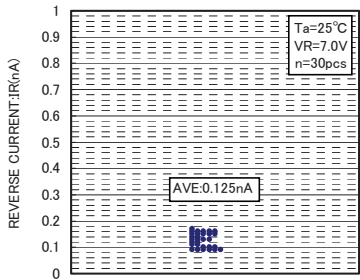
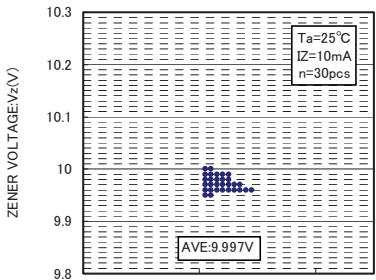
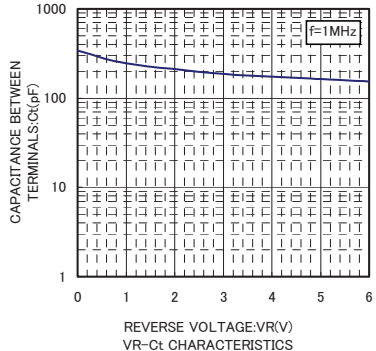
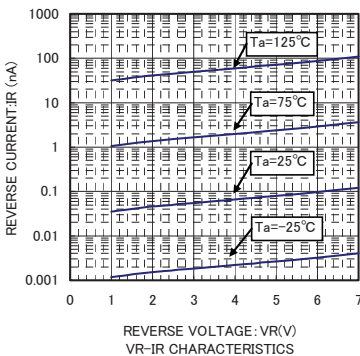
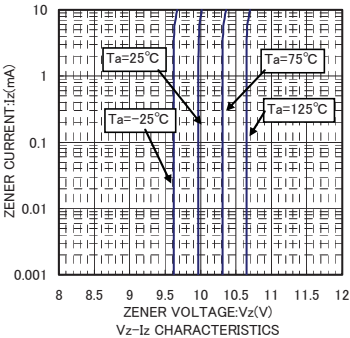
TYPE	TYPE NO.	TYPE	TYPE NO.
TDZ 5.1	A2	TDZ 13	35
TDZ 5.6	C2	TDZ 15	45
TDZ 6.2	E2	TDZ 16	55
TDZ 6.8	F2	TDZ 18	65
TDZ 7.5	H2	TDZ 20	75
TDZ 8.2	J2	TDZ 22	85
TDZ 9.1	L2	TDZ 24	95
TDZ 10	05	TDZ 27	A5
TDZ 11	15	TDZ 30	C5
TDZ 12	25		

Diodes

●Electrical characteristic curves (Ta=25°C)



Diodes



Vz DISPERSION MAP

IR DISPERSION MAP

Ct DISPERSION MAP

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