

Zener diode

KDZ7.5B

●Applications

Voltage regulation

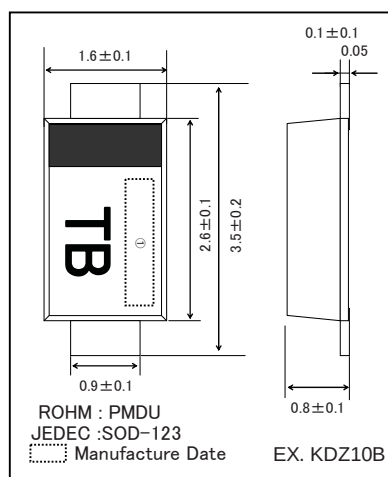
●Features

- 1) Small power mold type. (PMDU)
- 2) High ESD tolerance

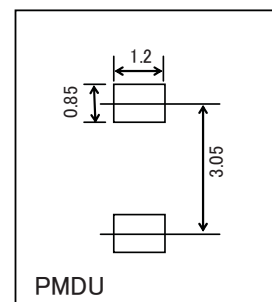
●Construction

Silicon epitaxial planar

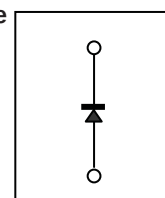
●Dimensions (Unit : mm)



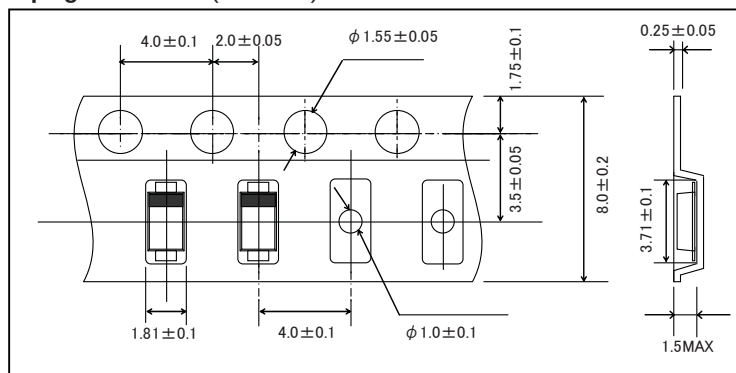
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power dissipation	P	1000	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

Diodes

●Electrical characteristics (Ta=25°C)

TYP.	Symbol					
	Zener voltage: Vz(V)				Reverse current: IR(μA)	
	MIN.	TYP.	MAX.	Iz(mA)	MAX.	VR(V)
KDZ 3.6B	3.600	3.813	4.000	40	60	1.0
KDZ 3.9B	3.900	4.136	4.400	40	40	1.0
KDZ 4.3B	4.300	4.572	4.800	40	20	1.0
KDZ 4.7B	4.700	4.924	5.200	40	20	1.0
KDZ 5.1B	5.100	5.368	5.700	40	20	1.0
KDZ 5.6B	5.600	5.856	6.300	40	20	1.5
KDZ 6.2B	6.200	6.509	7.000	40	20	3.0
KDZ 6.8B	6.800	7.280	7.700	40	20	3.5
KDZ 7.5B	7.500	7.889	8.400	40	20	4.0
KDZ 8.2B	8.200	8.655	9.300	40	20	5.0
KDZ 9.1B	9.100	9.747	10.200	40	20	6.0
KDZ 10B	10.000	10.310	11.200	40	10	7.0
KDZ 11B	11.000	11.510	12.300	20	10	8.0
KDZ 12B	12.000	12.500	13.500	20	10	9.0
KDZ 13B	13.300	13.820	15.000	20	10	10.0
KDZ 15B	14.700	15.350	16.500	20	10	11.0
KDZ 16B	16.200	16.860	18.300	20	10	12.0
KDZ 18B	18.000	19.000	20.300	20	10	13.0
KDZ 20B	20.000	20.820	22.400	20	10	15.0
KDZ 22B	22.000	23.850	24.500	10	10	17.0
KDZ 24B	24.000	25.310	27.600	10	10	19.0
KDZ 27B	27.000	28.700	30.800	10	10	21.0
KDZ 30B	30.000	31.570	34.000	10	10	23.0
KDZ 33B	33.000	34.950	37.000	10	10	25.0
KDZ 36B	36.000	39.240	40.000	10	10	27.0

※The Zener voltage (Vz) is measured 40ms after power is supplied.

●Marking (TYPE NO.)

TYPE	TYPE NO.	TYPE	TYPE NO.
KDZ 3.6B	GB	KDZ 12B	VB
KDZ 3.9B	HB	KDZ 13B	WB
KDZ 4.3B	JB	KDZ 15B	XB
KDZ 4.7B	KB	KDZ 16B	YB
KDZ 5.1B	LB	KDZ 18B	ZB
KDZ 5.6B	MB	KDZ 20B	AD
KDZ 6.2B	NB	KDZ 22B	BD
KDZ 6.8B	PB	KDZ 24B	CD
KDZ 7.5B	QB	KDZ 27B	DD
KDZ 8.2B	RB	KDZ 30B	ED
KDZ 9.1B	SB	KDZ 33B	FD
KDZ 10B	TB	KDZ 36B	GD
KDZ 11B	UB		

Diodes

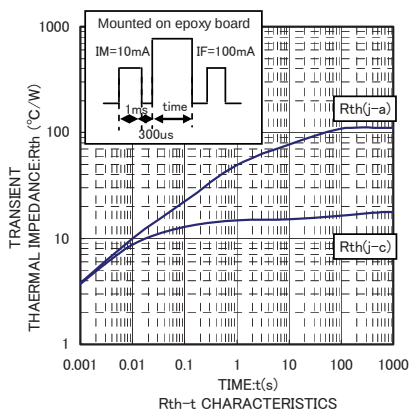
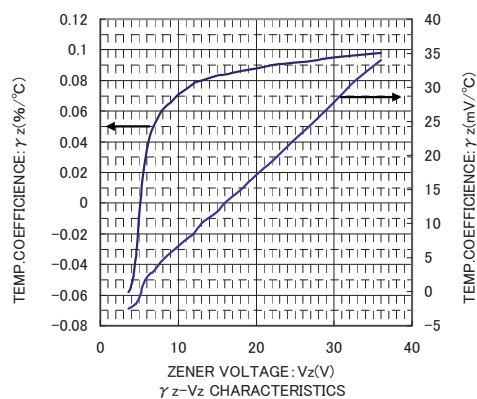
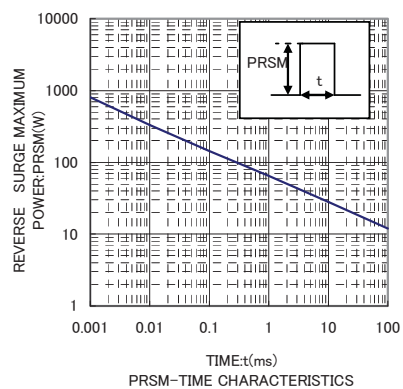
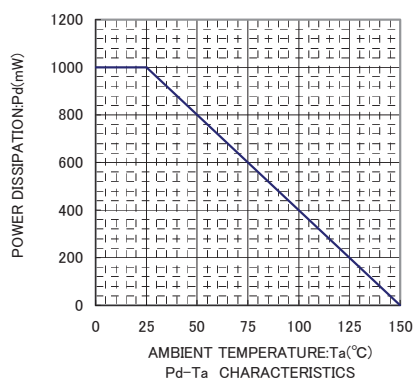
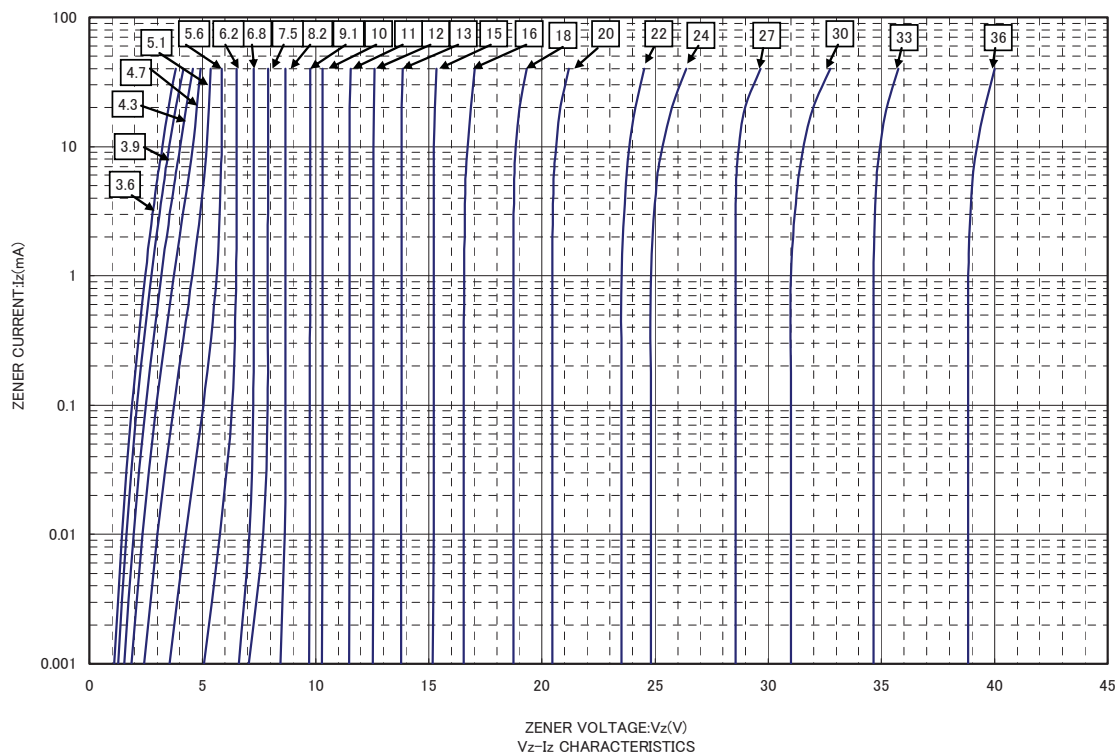


Figure 10 is a graph showing the Zener voltage V_Z versus Zener current I_Z characteristics for the 1N4748A Zener diode. The y-axis represents Zener Current I_Z in mA on a logarithmic scale from 0.001 to 100. The x-axis represents Zener Voltage V_Z in V on a linear scale from 6 to 10. Four curves are plotted for different ambient temperatures T_a : 25°C, 75°C, 125°C, and 150°C. The curves show that V_Z increases with I_Z and decreases with increasing T_a .

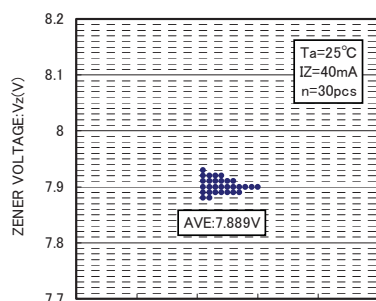
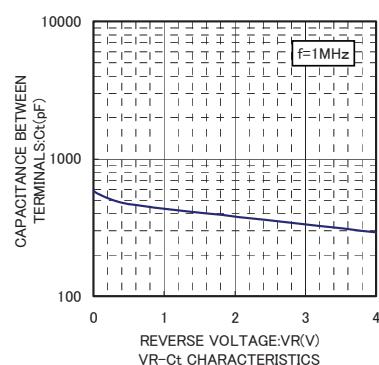
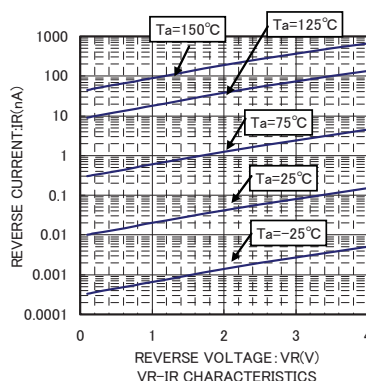
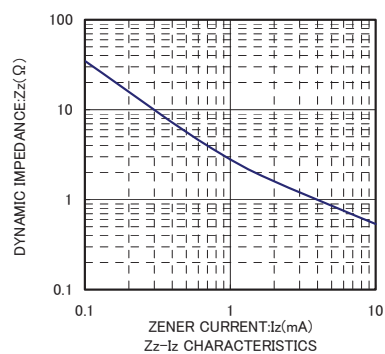
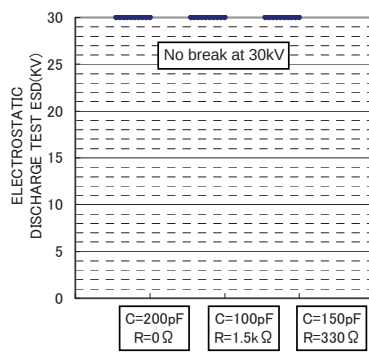


Figure 10 is a plot showing the capacitance between terminals C0 and C1. The y-axis represents capacitance in pF, ranging from 550 to 650. The x-axis represents frequency in MHz, ranging from 0 to 100. A single data point is plotted at 50 MHz, showing a capacitance of 582.1 pF. The test conditions are: Ta=25°C, f=1MHz, VR=0V, and n=10pcs.

Ct DISPERSION MAP



Zz-Iz CHARACTERISTICS



ESD DISPERSION MAP

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