Zener Diode

UDZV series Datasheet

●Application

Constant voltage control

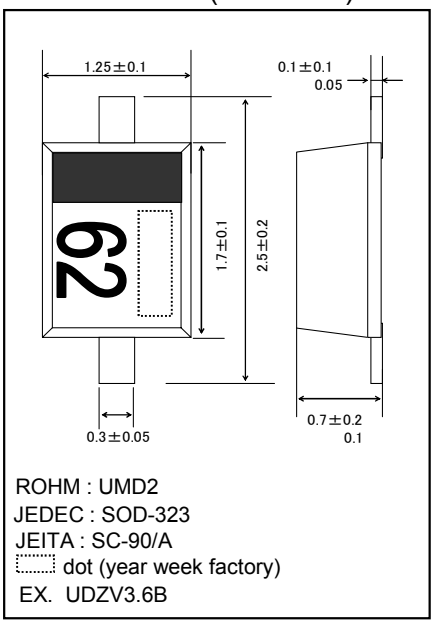
●Features

1) Compact,2-pin mini-mold type for high-density mounting. (UMD2)
2) High reliability.
3) Can be mounted automatically, using chip mounter.

●Construction

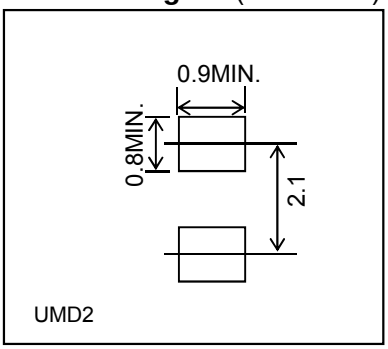
Silicon epitaxial planar

●Dimensions (Unit : mm)

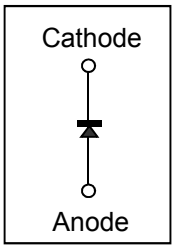


ROHM : UMD2
JEDEC : SOD-323
JEITA : SC-90/A
dot (year week factory)
EX. UDZV3.6B

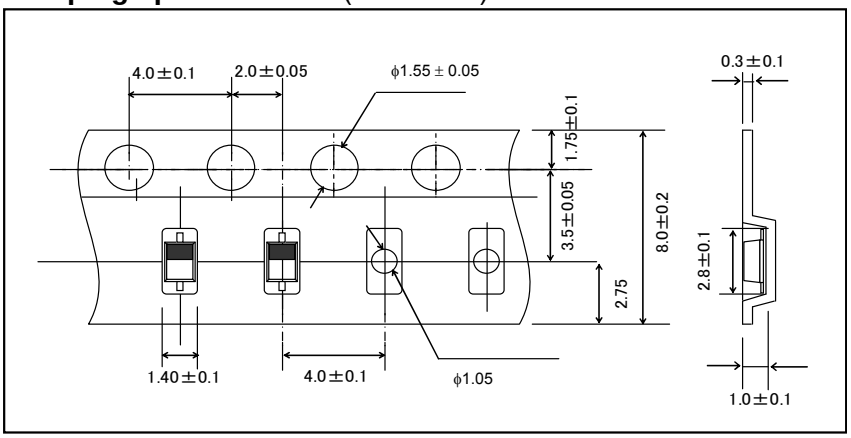
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)



●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Power dissipation	P	200	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	−55 to +150	°C
Operating temperature	Topr	−55 to +150	°C

●Electrical characteristics (Ta= 25°C)

TYP.	Symbol								
	Zener voltage : V_Z(V)			Operating resistance : Z_Z(Ω)		Rising operataing resistance : Z_Z(Ω)		Reverse current : I_R(μA)	
	MIN.	MAX.	I_Z(mA)	MAX.	I_Z(mA)	MAX.	I_Z(mA)	MAX.	V_R(V)
UDZV 3.6B	3.600	3.845	5.0	100	5.0	1000	1.0	10.0	1.0
UDZV 3.9B	3.890	4.160	5.0	100	5.0	1000	1.0	5.0	1.0
UDZV 4.3B	4.170	4.430	5.0	100	5.0	1000	1.0	5.0	1.0
UDZV 4.7B	4.550	4.750	5.0	100	5.0	800	0.5	2.0	1.0
UDZV 5.1B	4.980	5.200	5.0	80	5.0	500	0.5	2.0	1.5
UDZV 5.6B	5.490	5.730	5.0	60	5.0	200	0.5	1.0	2.5
UDZV 6.2B	6.060	6.330	5.0	60	5.0	100	0.5	1.0	3.0
UDZV 6.8B	6.650	6.930	5.0	40	5.0	60	0.5	0.5	3.5
UDZV 7.5B	7.280	7.600	5.0	30	5.0	60	0.5	0.5	4.0
UDZV 8.2B	8.020	8.360	5.0	30	5.0	60	0.5	0.5	5.0
UDZV 9.1B	8.850	9.230	5.0	30	5.0	60	0.5	0.5	6.0
UDZV 10B	9.770	10.210	5.0	30	5.0	60	0.5	0.1	7.0
UDZV 11B	10.760	11.220	5.0	30	5.0	60	0.5	0.1	8.0
UDZV 12B	11.740	12.240	5.0	30	5.0	80	0.5	0.1	9.0
UDZV 13B	12.910	13.490	5.0	37	5.0	80	0.5	0.1	10.0
UDZV 15B	14.340	14.980	5.0	42	5.0	80	0.5	0.1	11.0
UDZV 16B	15.850	16.510	5.0	50	5.0	80	0.5	0.1	12.0
UDZV 18B	17.560	18.350	5.0	65	5.0	80	0.5	0.1	13.0
UDZV 20B	19.520	20.390	5.0	85	5.0	100	0.5	0.1	15.0
UDZV 22B	21.540	22.470	5.0	100	5.0	100	0.5	0.1	17.0
UDZV 24B	23.720	24.780	5.0	120	5.0	120	0.5	0.1	19.0
UDZV 27B	26.190	27.530	5.0	150	5.0	150	0.5	0.1	21.0
UDZV 30B	29.190	30.690	5.0	200	5.0	200	0.5	0.1	23.0
UDZV 33B	32.150	33.790	5.0	250	5.0	250	0.5	0.1	25.0
UDZV 36B	35.070	36.870	5.0	300	5.0	300	0.5	0.1	27.0

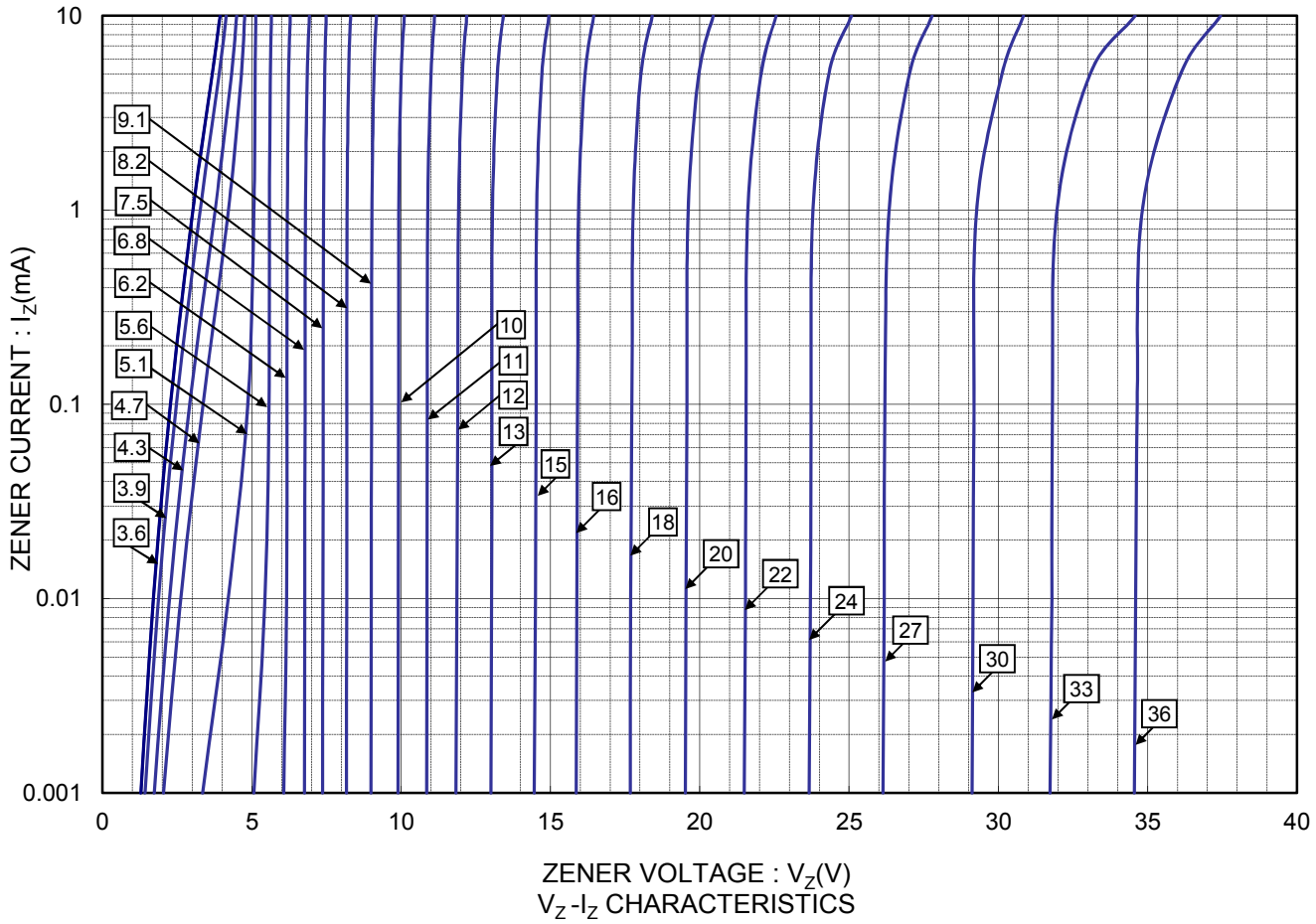
(1) The zener voltage(V_Z) is measured 40ms after power is supplied.

(2) The operating resistances(Z_Z,Z_Zk) are measured by superimposing a minute alternating current on the regulated current(I_Z)

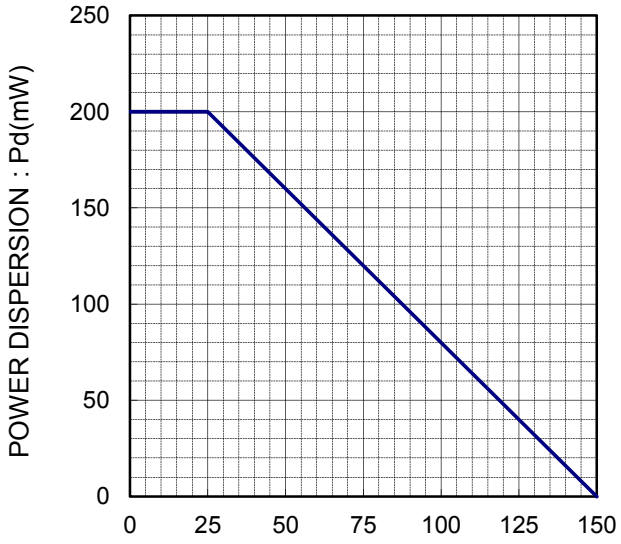
●MARKING (TYPE NO.)

TYPE	TYPE NO.	TYPE	TYPE NO.
UDZV 3.6B	6 2	UDZV 12B	2 5
UDZV 3.9B	7 2	UDZV 13B	3 5
UDZV 4.3B	8 2	UDZV 15B	4 5
UDZV 4.7B	9 2	UDZV 16B	5 5
UDZV 5.1B	A 2	UDZV 18B	6 5
UDZV 5.6B	C 2	UDZV 20B	7 5
UDZV 6.2B	E 2	UDZV 22B	8 5
UDZV 6.8B	F 2	UDZV 24B	9 5
UDZV 7.5B	H 2	UDZV 27B	A 5
UDZV 8.2B	J 2	UDZV 30B	C 5
UDZV 9.1B	L 2	UDZV 33B	E 5
UDZV 10B	0 5	UDZV 36B	F 5
UDZV 11B	1 5		

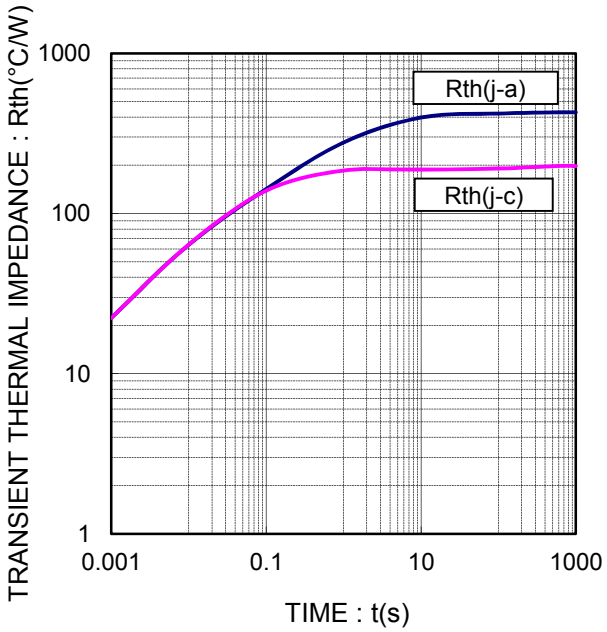
●Electrical characteristic curves



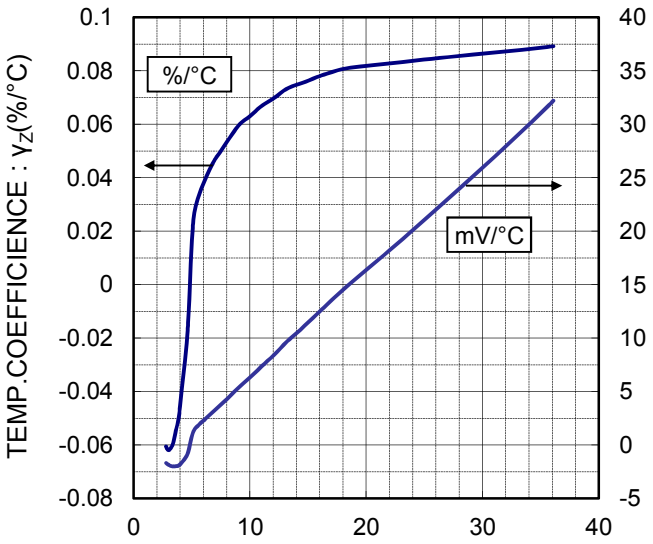
●Electrical characteristic curves



Pd-Ta CHARACTERISTICS

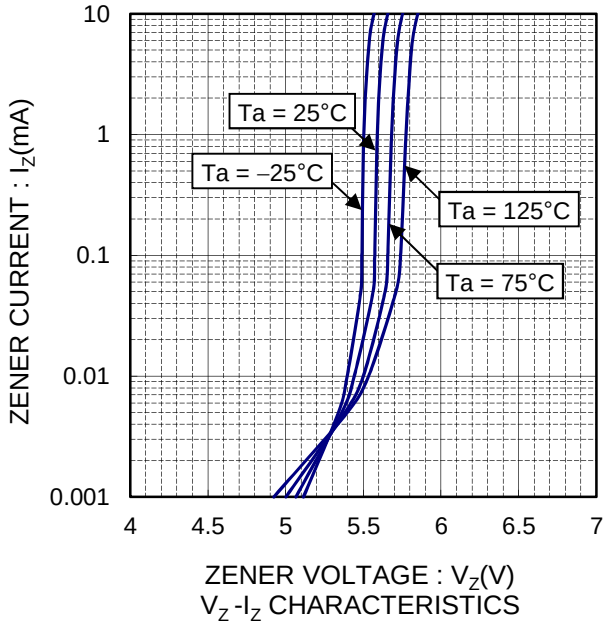


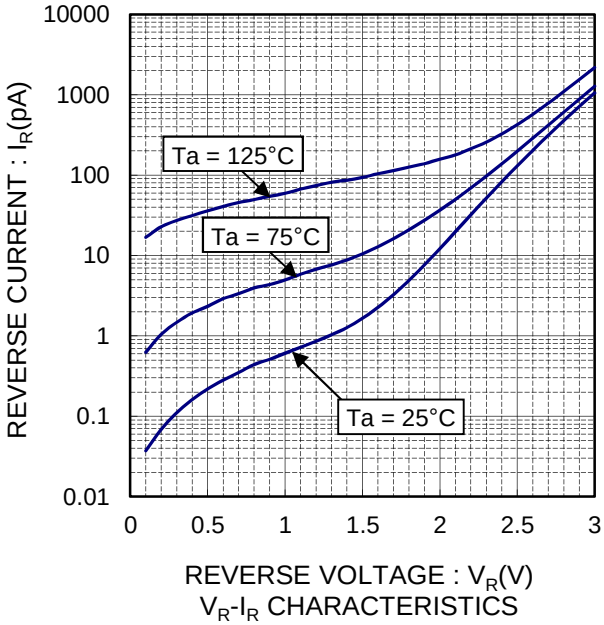
Rth-t CHARACTERISTICS

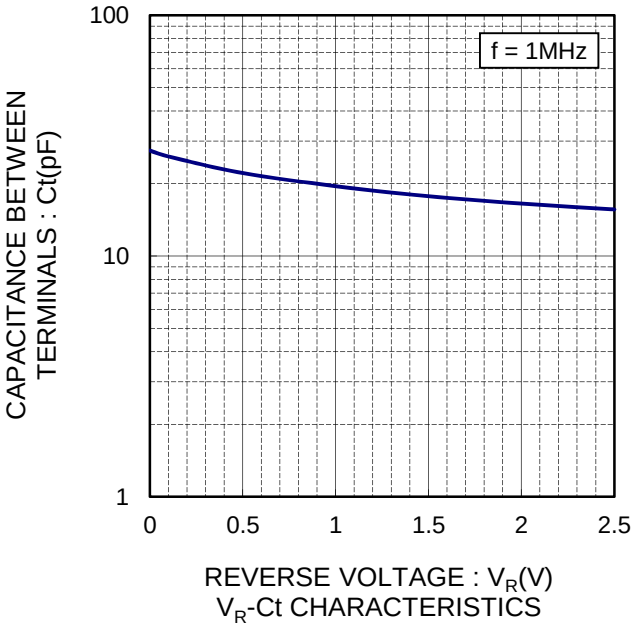


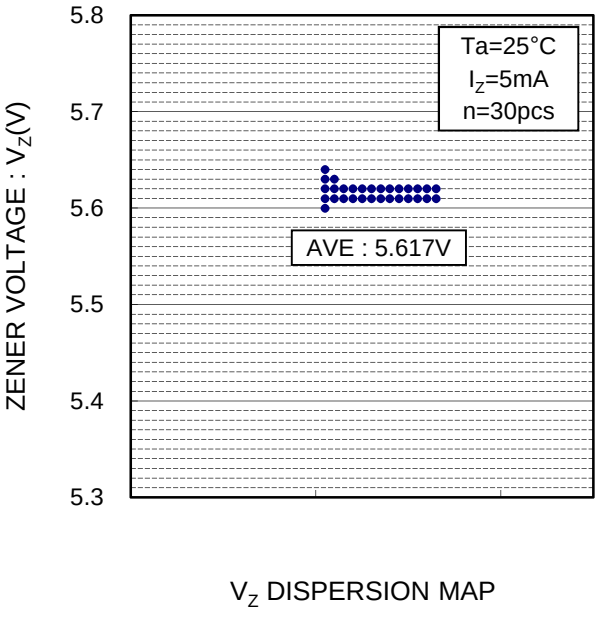
γZ-VZ CHARACTERISTICS

●Electrical characteristic curves

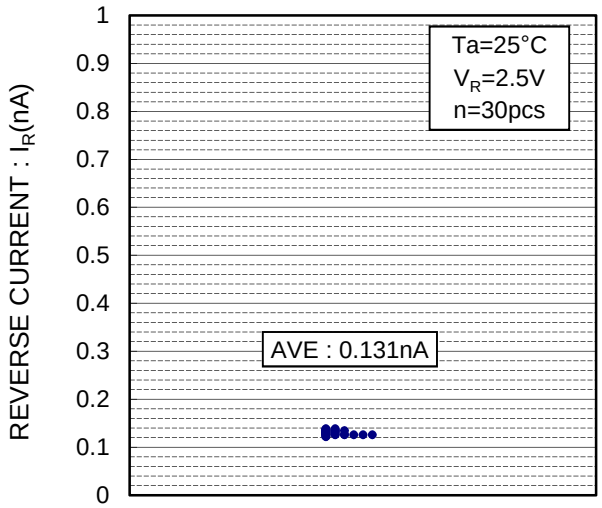




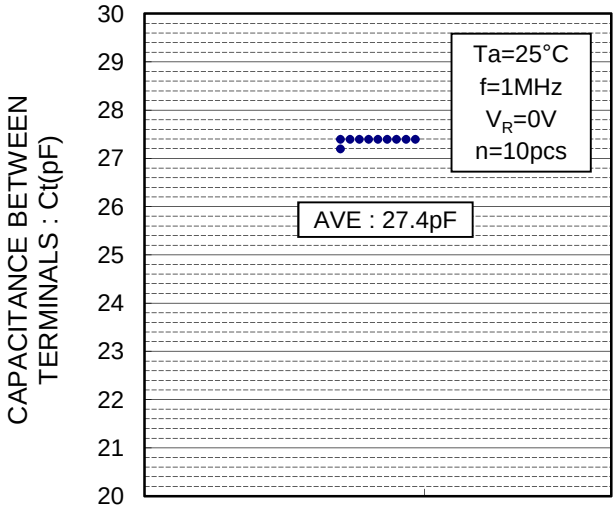




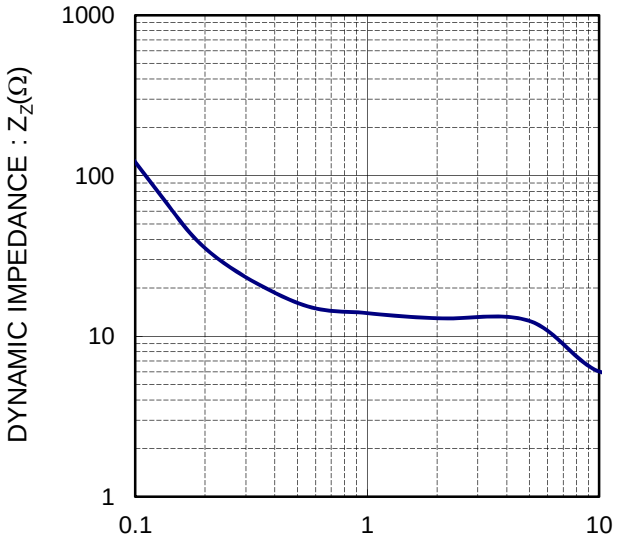
●Electrical characteristic curves



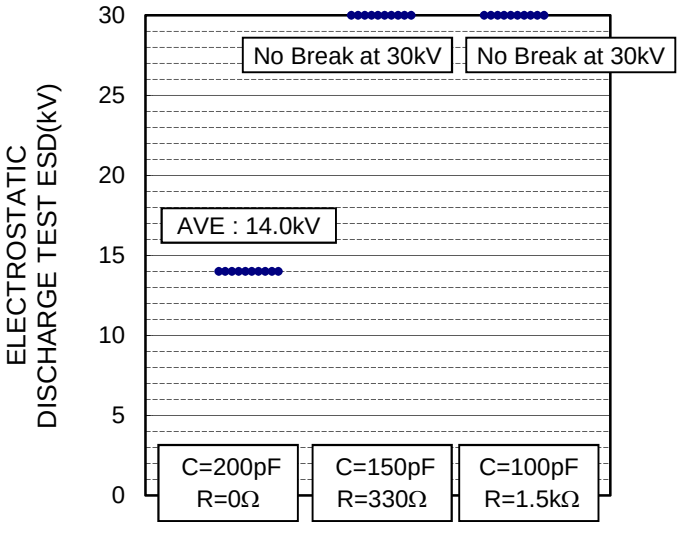
I_R DISPERSION MAP



Ct DISPERSION MAP



Z_Z -I_Z CHARACTERISTICS



ESD DISPERSION MAP

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