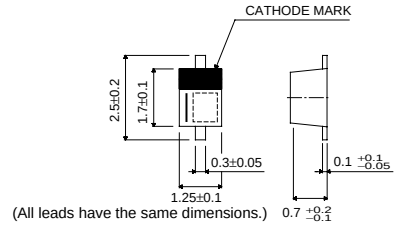
Zener diode

UDZS Series

●**Applications**
Constant voltage control

●**Features**
1) Compact, 2-pin mini-mold type for high-density mounting. (UMD2)
2) Non-wire bonding structure improves.
3) High demand voltage range (3.6V-36V) is manufactured on high-efficient non-wire bonding production line.

●**External dimensions** (Unit : mm)



(All leads have the same dimensions.)

* Type No. stamped on body in digital marking.

ROHM : UMD2
EIAJ : SC-76
JEDEC : SOD-323

●**Construction**
Silicon epitaxial planar

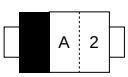
●**Absolute maximum ratings** (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power dissipation	P	200	mW
Junction temperature	Tj	125	°C
Storage temperature	Tstg	−55 to +150	°C
Operating temperature	Topr	−55 to +150	°C

●**Markings** (Type No.)

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

(Ex.) UDZS 5.1B



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

Type	Zener voltage			Operating resistance		Rising operating resistance		Reverse current	
	V_Z(V)			Z_Z(Ω)		Z_{ZK}(Ω)		I_R(μA)	
	Min.	Max.	I_Z (mA)	Max.	I_Z (mA)	Max.	I_Z (mA)	Max.	V_R (V)
UDZS 3.6B	3.600	3.845	5	100	5	1000	1.0	10	1.0
UDZS 3.9B	3.890	4.160	5	100	5	1000	1.0	5	1.0
UDZS 4.3B	4.170	4.430	5	100	5	1000	1.0	5	1.0
UDZS 4.7B	4.550	4.750	5	100	5	800	0.5	2	1.0
UDZS 5.1B	4.980	5.200	5	80	5	500	0.5	2	1.5
UDZS 5.6B	5.490	5.730	5	60	5	200	0.5	1	2.5
UDZS 6.2B	6.060	6.330	5	60	5	100	0.5	1	3.0
UDZS 6.8B	6.650	6.930	5	40	5	60	0.5	0.5	3.5
UDZS 7.5B	7.280	7.600	5	30	5	60	0.5	0.5	4.0
UDZS 8.2B	8.020	8.360	5	30	5	60	0.5	0.5	5.0
UDZS 9.1B	8.850	9.230	5	30	5	60	0.5	0.5	6.0
UDZS 10B	9.770	10.210	5	30	5	60	0.5	0.1	7.0
UDZS 11B	10.760	11.220	5	30	5	60	0.5	0.1	8.0
UDZS 12B	11.740	12.240	5	30	5	80	0.5	0.1	9.0
UDZS 13B	12.910	13.490	5	37	5	80	0.5	0.1	10.0
UDZS 15B	14.340	14.980	5	42	5	80	0.5	0.1	11.0
UDZS 16B	15.850	16.510	5	50	5	80	0.5	0.1	12.0
UDZS 18B	17.560	18.350	5	65	5	80	0.5	0.1	13.0
UDZS 20B	19.520	20.390	5	85	5	100	0.5	0.1	15.0
UDZS 22B	21.540	22.470	5	100	5	100	0.5	0.1	17.0
UDZS 24B	23.720	24.780	5	120	5	120	0.5	0.1	19.0
UDZS 27B	26.190	27.530	5	150	5	150	0.5	0.1	21.0
UDZS 30B	29.190	30.690	5	200	5	200	0.5	0.1	23.0
UDZS 33B	32.150	33.790	5	250	5	250	0.5	0.1	25.0
UDZS 36B	35.070	36.870	5	300	5	300	0.5	0.1	27.0

Notes) 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).

●**Electrical characteristic curves** (Ta=25°C)

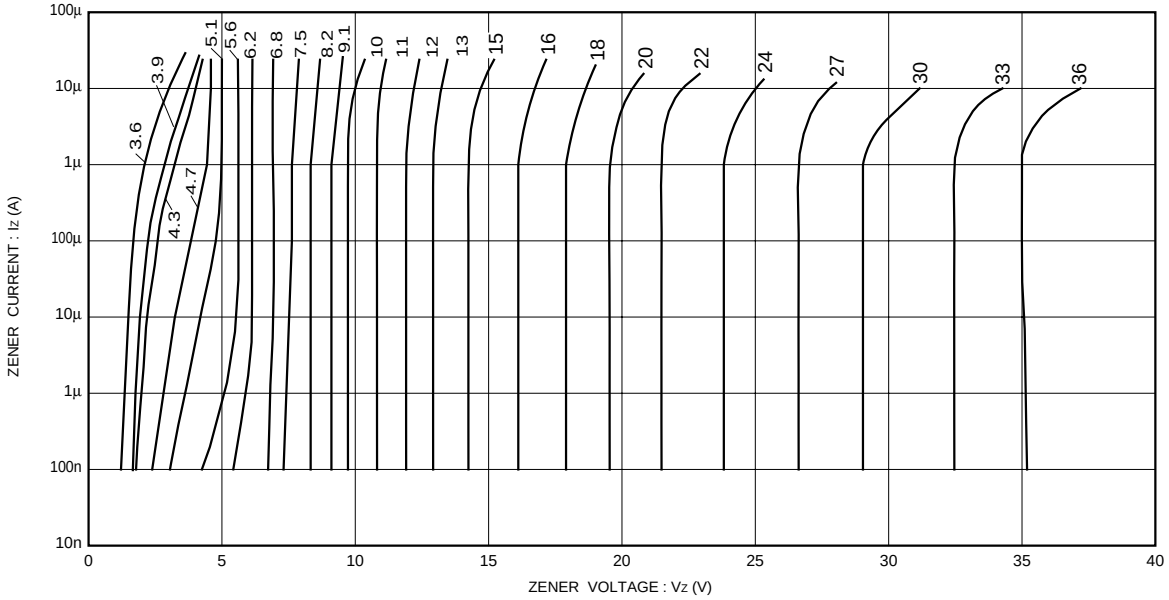


Fig.1 Zener voltage characteristics

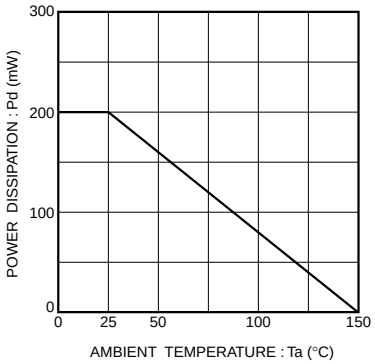


Fig.2 Derating curve

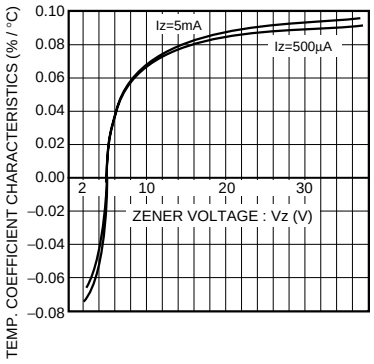


Fig.3 Zener voltage-temp. coefficient characteristics

●**Makeup of the part number**

- Please follow the part number designation when the order is placed.
- Fill in from the left, leaving any extra boxes empty on the right.
- Please refer packing specification about packing form.

●**Zener diodes**

Example) UDZ TE – 17 2. 0 B

UDZ	TE	17	2.0	B
Part number	Packaging configuration		Zener voltage	Subdivision

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