

# Zener diode

## UDZS Series

### ●Applications

Constant voltage control

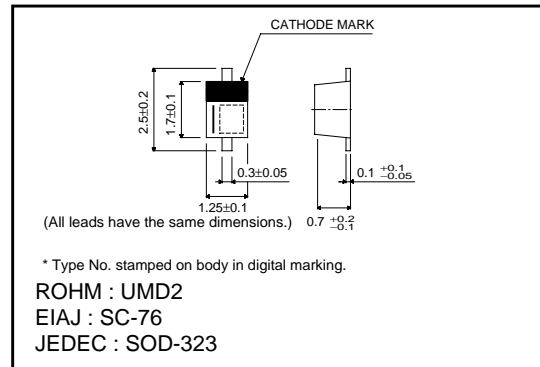
### ●Features

- 1) Compact, 2-pin mini-mold type for high-density mounting. (UMD2)
- 2) Non-wire bonding structure improves.
- 3) High demand voltage range (5.1V-10V) is manufactured on high-efficient non-wire bonding production line.

### ●Construction

Silicon epitaxial planar

### ●External dimensions (Units : mm)



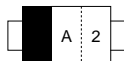
### ●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Power dissipation	P	200	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55~+150	°C
Operating temperature	T <sub>opr</sub>	-55~+150	°C

### ●Markings (Type No.)

Product name	Type No.	Product name	Type No.
UDZS 5.1B	A 2	UDZS 7.5B	H 2
UDZS 5.6B	C 2	UDZS 8.2B	J 2
UDZS 6.2B	E 2	UDZS 9.1B	L 2
UDZS 6.8B	F 2	UDZS 10B	0 5

(Ex.) UDZS 5.1B



Diodes

●Electrical characteristics (Ta = 25°C)

Type	Zener voltage			Operating resistance		Rising operating resistance		Reverse current	
	Vz (V)			Zz (Ω)		Zzk (Ω)		IR (μA)	
	Min.	Max.	Iz (mA)	Max.	Iz (mA)	Max.	Iz (mA)	Max.	VR (V)
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

Notes) 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).

●Electrical characteristic curves (Ta = 25°C)

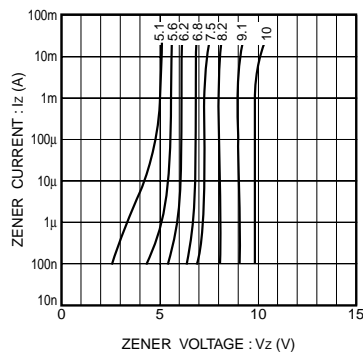


Fig.1 Zener voltage characteristics

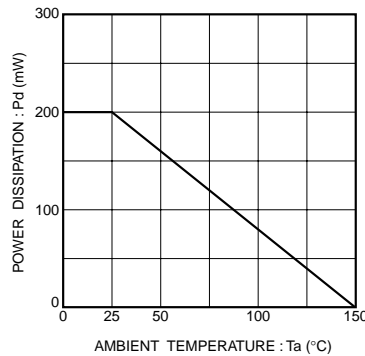


Fig.2 Derating curve

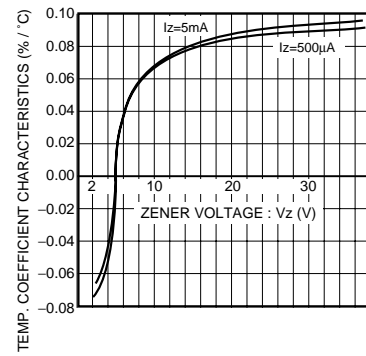


Fig.3 Zener voltage-temp. coefficient characteristics

\*UDZS series : Vz = 5.1V~10V