

# Zener diode

## UDZS Series

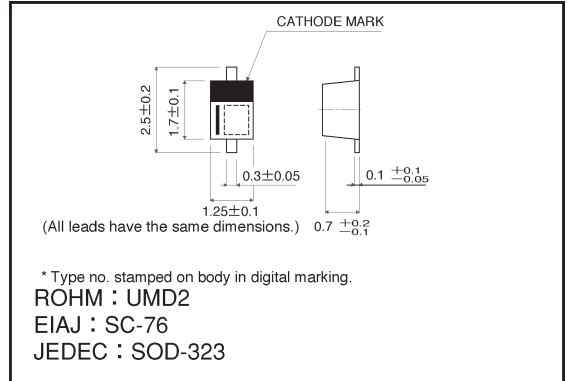
●Application

Constant voltage control

●Features

- 1) Extremely compact, 2-pin mini-mold type for high-density mounting. (UMD2-SOD-323)
- 2) Non-wire bonding structure improves antu-surge capability.
- 3) High demand voltage range (5.1V-10V) is manufactured on high-efficient non-write bonding production line.

●External dimensions (Units: mm)



●Construction

Silicon epitaxial planar

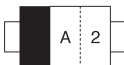
●Absolute maximum ratings (Ta = 25°C)

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



●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	1.0	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 unless specified otherwise)

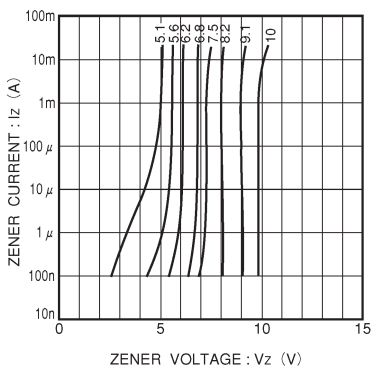


Fig. 1 Zener characteristics

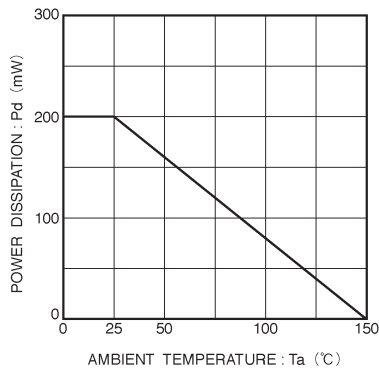


Fig. 2 Derating curve