

# Zener diode

## UMZ8.2T

### ● Applications

Constant voltage control  
Noise suppression on signal line

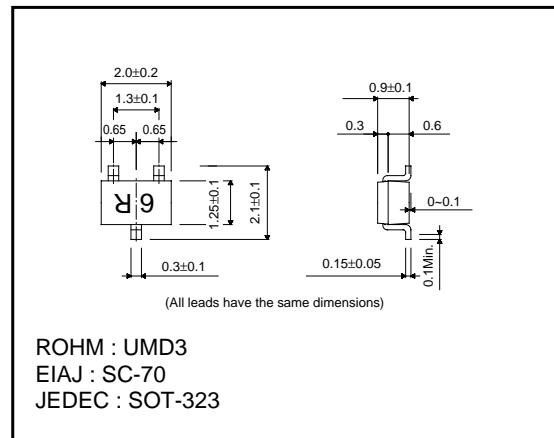
### ● Features

- 1) Small surface mounting type. (UMD3)
- 2) Multiple diodes with common cathode configuration.
- 3) High reliability.

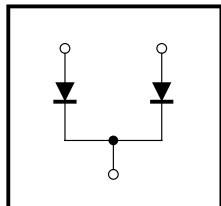
### ● Construction

Silicon epitaxial planar

### ● External dimensions (Units : mm)



### ● Circuit



### ● Absolute maximum ratings ( $T_a = 25^\circ\text{C}$ )

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

\* Total of 2 elements.

### ● Electrical characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Zener voltage	V <sub>z</sub>	7.76	—	8.64	V	I <sub>z</sub> =5mA
Reverse current	I <sub>R</sub>	—	—	0.50	μA	V <sub>R</sub> =5V
Operating resistance	Z <sub>z</sub>	—	—	30	Ω	I <sub>z</sub> =5mA
Rising operating resistance	Z <sub>zk</sub>	—	—	60	Ω	I <sub>z</sub> =0.5mA

## Diodes

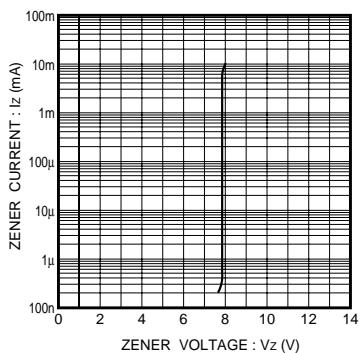
● Electrical characteristic curves ( $T_a = 25^\circ\text{C}$ )

Fig. 1 Zener voltage characteristics

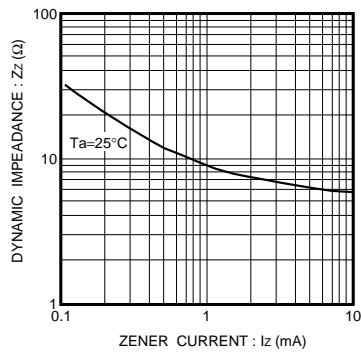
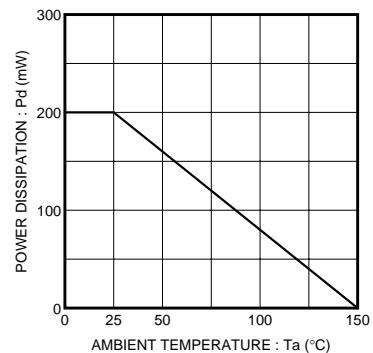
Fig. 2 Operating resistance  
Zener current characteristics

Fig. 3 Derating curve