

Zener diode

UMZ12N

● Applications

Constant voltage control
Noise suppression on single line

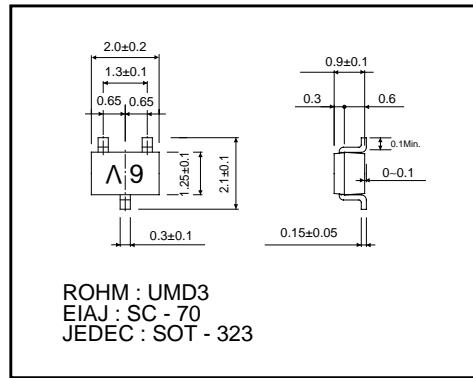
● Features

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

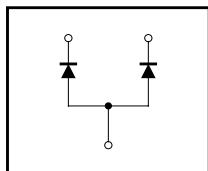
● Construction

Silicon epitaxial planar

● External dimensions (Units : mm)



● Circuit



● Absolute maximum ratings ($T_a=25^\circ C$)

Parameter	Symbol	Limits	Unit
Power dissipation*	P	200	mW
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

* Total of 2 elements

● Electrical characteristics ($T_a=25^\circ C$)

Parameter	Symbol	Min.	Max.	Unit	Conditions
Zener voltage	V_z	11.0	13.0	V	$I_z=5mA$
Reverse current	I_R	—	0.10	μA	$V_R=9V$
Operating resistance	Z_z	—	30	Ω	$I_z=5mA$
Rising operating resistance	Z_{zK}	—	80	Ω	$I_z=0.5mA$

Diodes

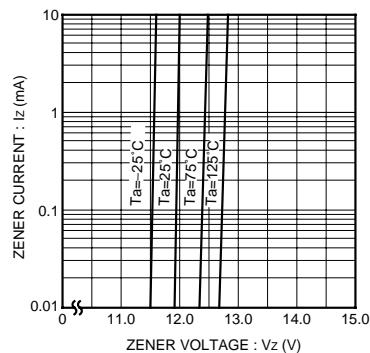
● Electrical characteristic curves ($T_a=25^\circ\text{C}$)

Fig.1 Zener voltage characteristics

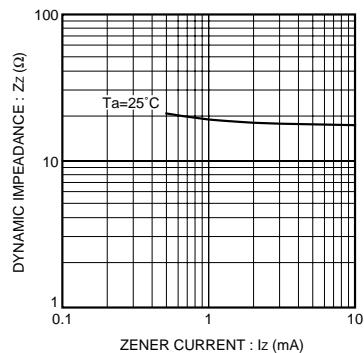
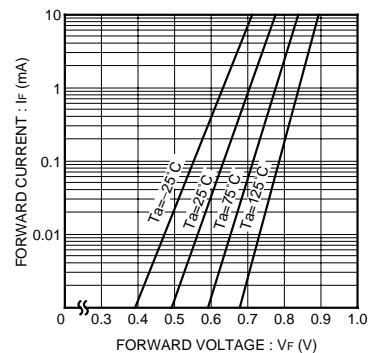
Fig.2 Operating resistance
Zener current characteristics

Fig.3 Forward characteristics

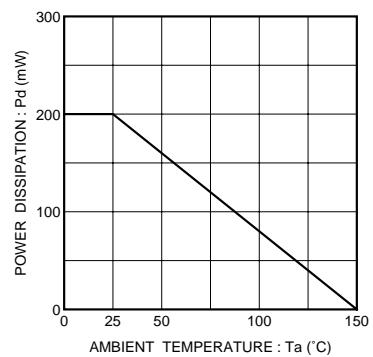


Fig.4 Derating curve