

# Zener diode

## UMZ12N

### ● Applications

Constant voltage control

Noise suppression on signal line

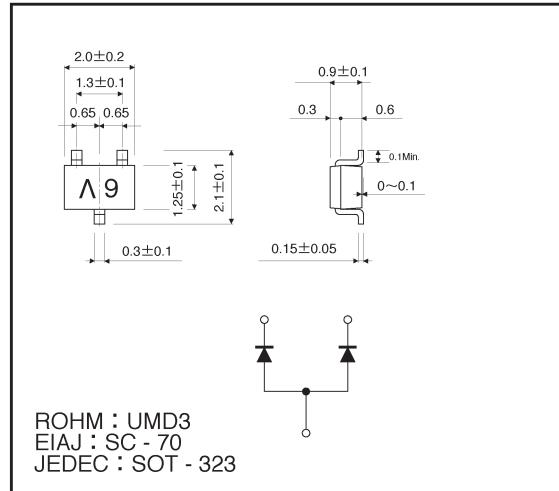
### ● Features

- 1) Compact mold type. (UMD3)
- 2) High reliability.
- 3) Multiple diodes with common anode configuration.

### ● Construction

Silicon epitaxial planar

### ● External dimensions (Units: mm)



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

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

\* Total of 2 elements

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

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

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

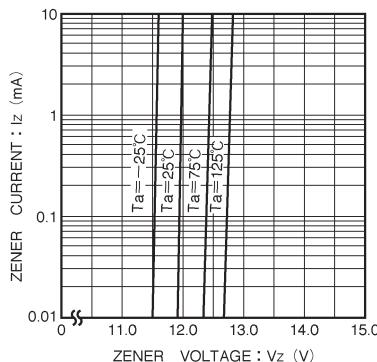


Fig. 1 Zener voltage characteristics

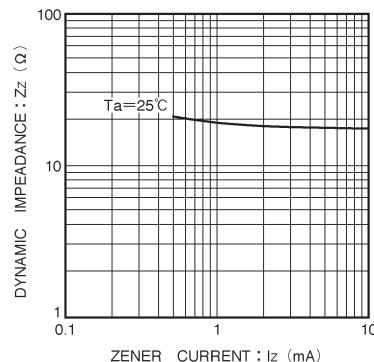


Fig. 2 Operating resistance  
Zener current characteristics

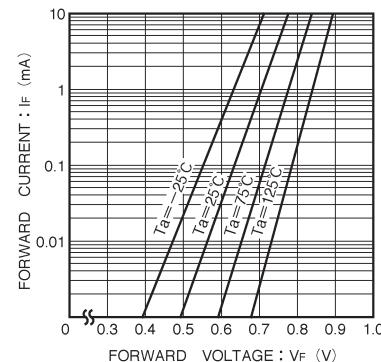


Fig. 3 Forward characteristics

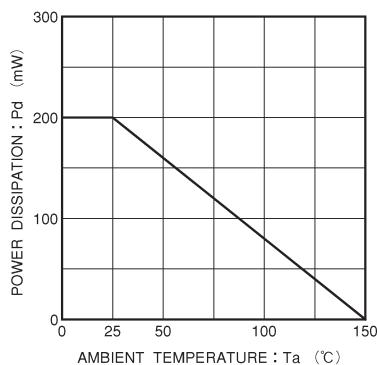


Fig. 4 Derating curve