

# Zener diode

## UMZ8.2T

### ● Applications

Constant voltage control

Noise suppression on signal line

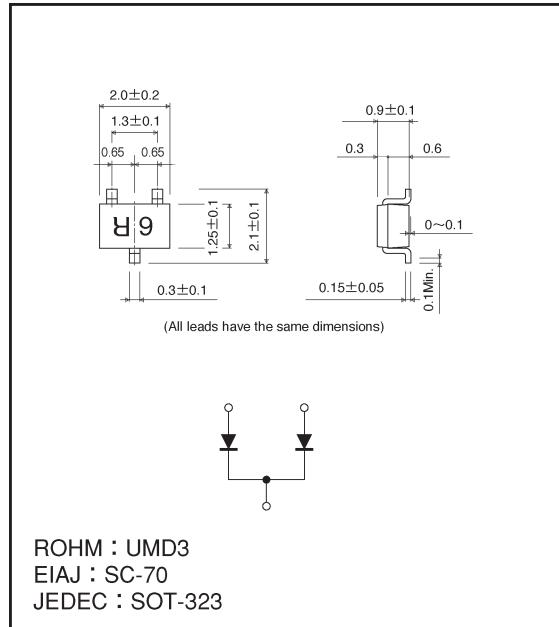
### ● Features

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

### ● Construction

Silicon epitaxial planar

### ● External dimensions (Units: mm)



ROHM : UMD3  
EIAJ : SC-70  
JEDEC : SOT-323

### ● 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

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Zener voltage	$V_z$	7.76	8.2	8.64	V	$I_z=5\text{mA}$
Reverse current	$I_R$	—	—	0.50	$\mu\text{A}$	$V_R=5\text{V}$
Operating resistance	$Z_z$	—	—	30	$\Omega$	$I_z=5\text{mA}$
Rising operating resistance	$Z_{zk}$	—	—	60	$\Omega$	$I_z=0.5\text{mA}$

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

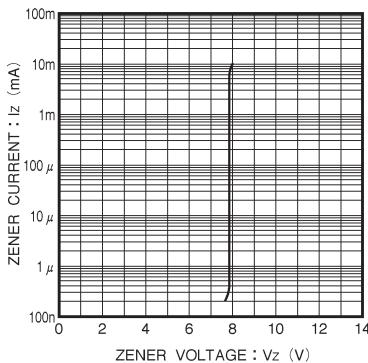


Fig. 1 Zener voltage characteristics

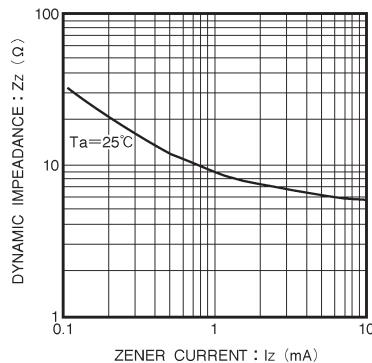


Fig. 2 Operating resistance  
Zener current characteristics

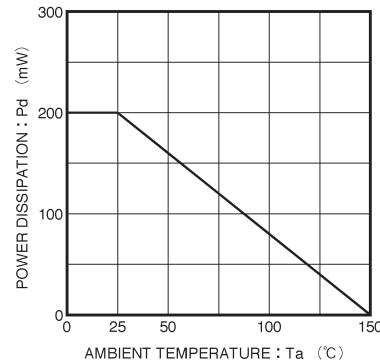


Fig. 3 Derating curve