

# Zener Diode

## UMZ6.8N

### ●Applications

Constant voltage control  
For the ESD measure of a signal line

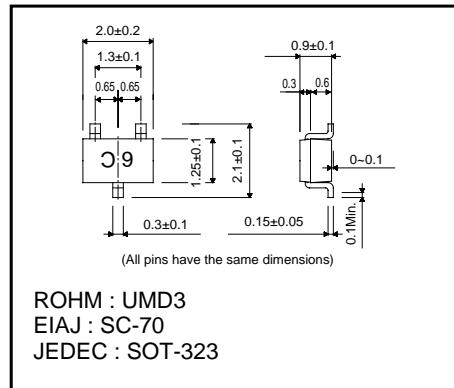
### ●Features

- 1) Small surface mounting type (UMD3)
- 2) Composite type with two cathode common elements
- 3) High reliability

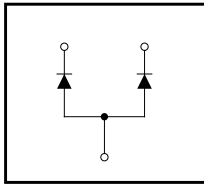
### ●Construction

Silicon epitaxial planar

### ●External dimensions (Units: mm)



### ●Circuit



### ●Absolute maximum ratings (Ta=25°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 (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Zener voltage	V <sub>Z</sub>	6.47	–	7.14	V	I <sub>Z</sub> =5mA
Reverse current	I <sub>R</sub>	–	–	0.5	μA	V <sub>R</sub> =3.5V
Operating resistance	Z <sub>Z</sub>	–	–	40	Ω	I <sub>Z</sub> =5mA
Capacitance between terminals	C <sub>T</sub>	–	9	–	pF	f=1MHz, V <sub>R</sub> =5V

Diodes

●Others

Item	Standard1	IEC1000-4-2
Device configuration	Charge/discharge capacitance : 200pF±10% Discharge resistance : 400Ω ±10%	Charge/discharge capacitance : 150pF Discharge resistance : 330Ω
Judgment contents	5 repetitions No spark or smoke emitted : ±25kV No element destruction : ±20kV No malfunction : ± 8kV	10 repetitions No malfunction Contact : ± 8kV Suspended : ±15kV

●Electrical characteristic curves (Ta=25°C)

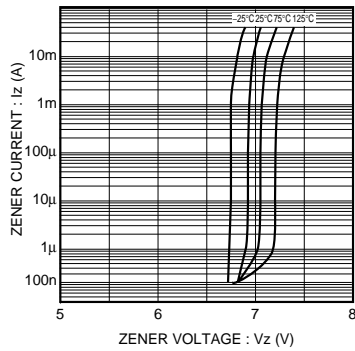


Fig.1 Zener voltage characteristic

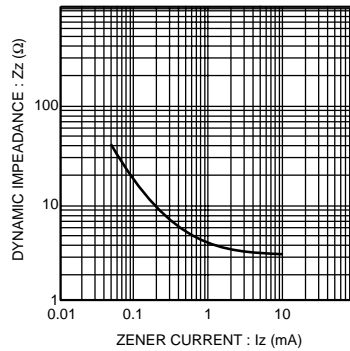


Fig.2 Operating resistance Zener current characteristic

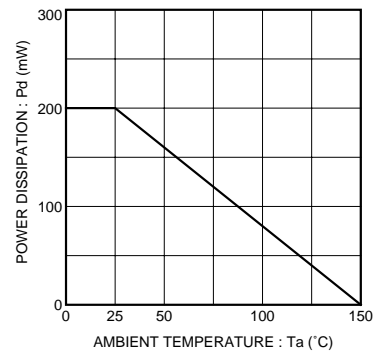


Fig.3 Derating curve