

Zener Diode

UMZ6.8N

● Applications

Constant voltage control
For the ESD measure of a signal line

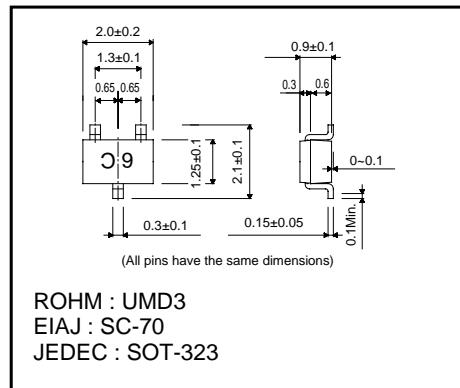
● Features

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

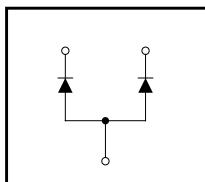
● Construction

Silicon epitaxial planar

● External dimensions (Units: mm)



● Circuit



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

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 ($T_a=25^\circ C$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Zener voltage	V _z	6.47	—	7.14	V	I _z =5mA
Reverse current	I _R	—	—	0.5	μA	V _R =3.5V
Operating resistance	Z _z	—	—	40	Ω	I _z =5mA
Capacitance between terminals	C _T	—	9	—	pF	f=1MHz, V _R =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)

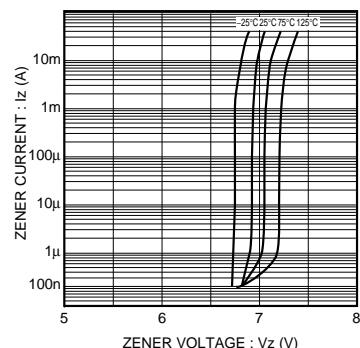


Fig.1 Zener voltage characteristic

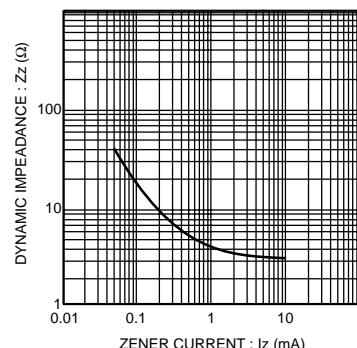
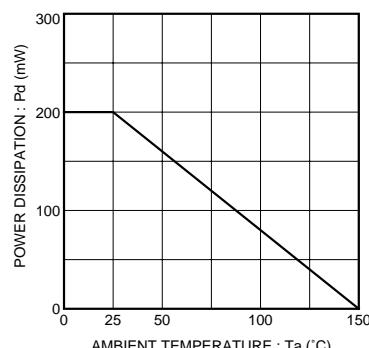
Fig.2 Operating resistance
Zener current characteristic

Fig.3 Derating curve