Zener Diode

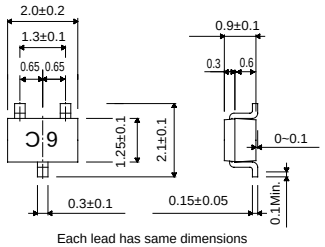
UMZ6.8N

●**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)



Each lead has same dimensions

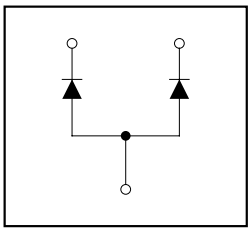
ROHM : UMD3
EIAJ : SC-70
JEDEC : SOT-323

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

Parameter	Symbol	Limits	Unit
Power dissipation *	P	200	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	–55~+150	°C

* Total of 2 elements

●**Equivalent circuit**



●**Electrical characteristics** (Ta=25°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

●**Others**

Parameter	IEC61000-4-2	
Device configuration	·Charge / discharge capacitance	: 150pF
	·Discharge resistance	: 330Ω
Judgment contents	·10 repetitions	
	·No malfunction	
	·Contact	: ±8kV
	·Suspended	: ±15kV

●**Electrical characteristic curves** (Ta=25°C)

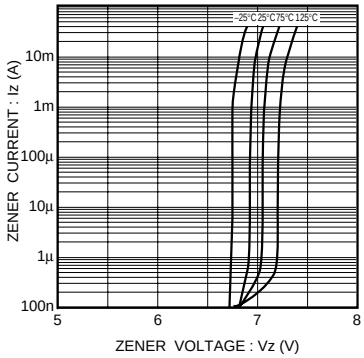


Fig.1 Zener voltage characteristic

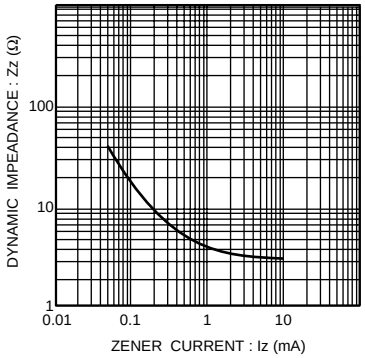


Fig.2 Operating resistance
Zener current characteristic

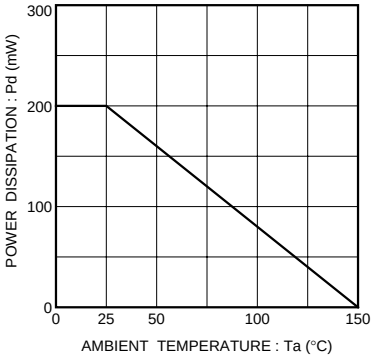


Fig.3 Derating curve