

# Zener diode

## UMZ6.8EN

### ●Applications

Constant voltage control  
For the ESD measure of a signal line

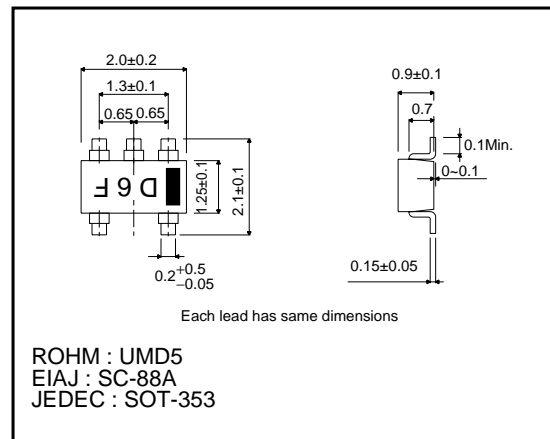
### ●Features

- 1) Small surface mounting type. (UMD5)
- 2) Composite type with four anode common elements
- 3) High reliability

### ●Construction

Silicon epitaxial planar

### ●External dimensions (Units : mm)

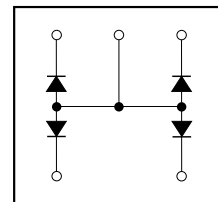


### ●Absolute maximum ratings (Ta=25°C)

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 4 elements

### ●Equivalent circuit



### ●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

### ●Others

Parameter	IEC61000-4-2
Device configuration	<ul style="list-style-type: none"> <li>•Charge / discharge capacitance : 150pF</li> <li>•Discharge resistance : 330Ω</li> </ul>
Judgment contents	<ul style="list-style-type: none"> <li>•10 repetitions</li> <li>•No malfunction</li> <li>•Contact : ±8kV</li> <li>•Suspended : ±15kV</li> </ul>

Diodes

●Electrical characteristic curves (Ta=25°C)

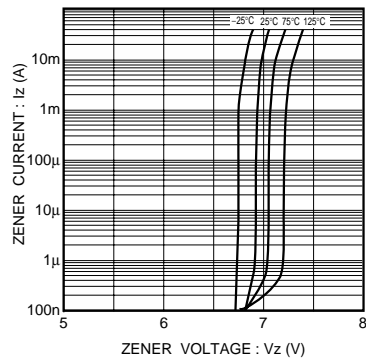


Fig.1 Zener voltage characteristic

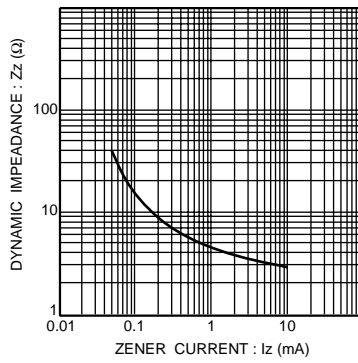


Fig.2 Operating resistance Zener current characteristic

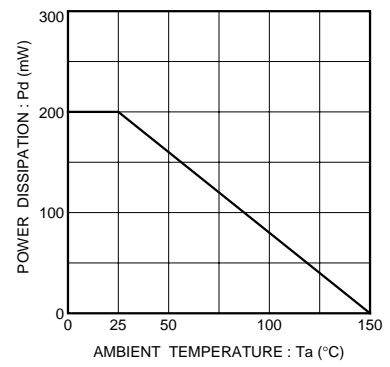


Fig.3 Derating curve