

# Zener diode

## EMZ6.8E

### ●Applications

Voltage regulation

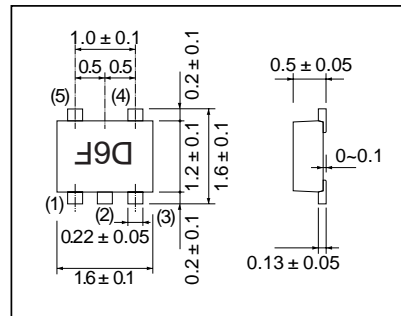
### ●Features

- 1) Ultra small mold type. (EMD5)
- 2) Composite type with two anode common elements
- 3) High reliability

### ●Construction

Silicon epitaxial planar

### ●External dimensions (Units : mm)

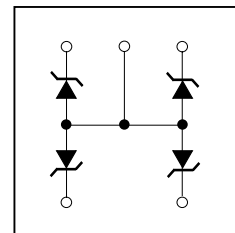


### ●Absolute maximum ratings (Ta=25°C)

| Parameter            | Symbol           | Limits   | Unit |
|----------------------|------------------|----------|------|
| Power dissipation*   | P                | 150      | mW   |
| Junction temperature | T <sub>j</sub>   | 150      | °C   |
| Storage temperature  | T <sub>stg</sub> | -55~+150 | °C   |

\* Total of 2 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  |

Note ) Please pay attention to static electricity when handling.

Diodes

●Others

| Parameter             | IEC-1000-4-2   |
|-----------------------|--|
| Equipment composition | <ul style="list-style-type: none"> <li>· Charge discharge capacitance : 150pF</li> <li>· Discharge resistance : 330Ω</li> </ul>                              |
| Criterion             | <ul style="list-style-type: none"> <li>· Repeat by 10 times</li> <li>· No erroneous operation</li> <li>· Contact : ±8kV</li> <li>· In air : ±15kV</li> </ul> |

| Parameter            | Test condition | Typical data |
|----------------------|----------------|--------------|
| Junction capacitance | f=1MHz, VR=5V  | 9pF          |

●Electrical characteristic curves (Ta=25°C)

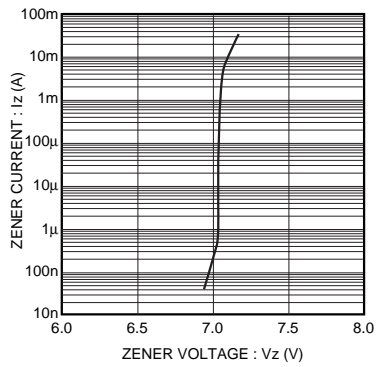


Fig.1 Zener current characteristic

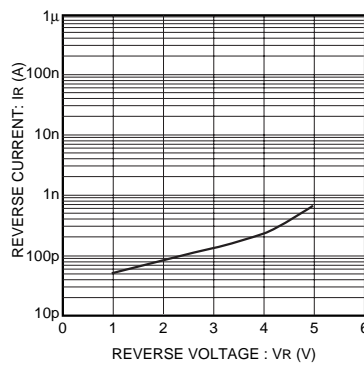


Fig.2 Reverse current characteristics

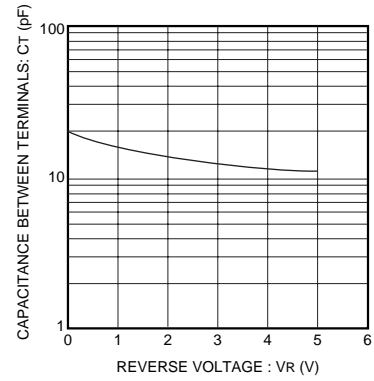


Fig.3 Capacitance between terminals characteristics

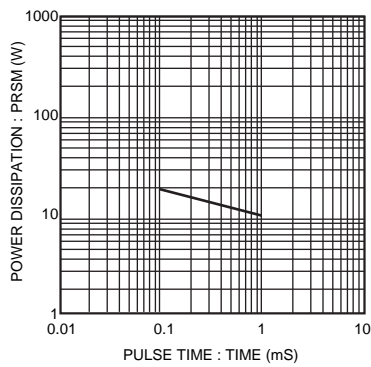


Fig.4 Reverse power dissipation

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