

## 8.0kV 5mA HIGH VOLTAGE DIODES

ESJA58-08A is high reliability resin molded type high voltage diode in small size package which is sealed a multilayered mesa type silicon chip by epoxy resin.

### Features

- High speed switching
- High Current
- High surge resistivity for CRT discharge
- High reliability design
- High Voltage

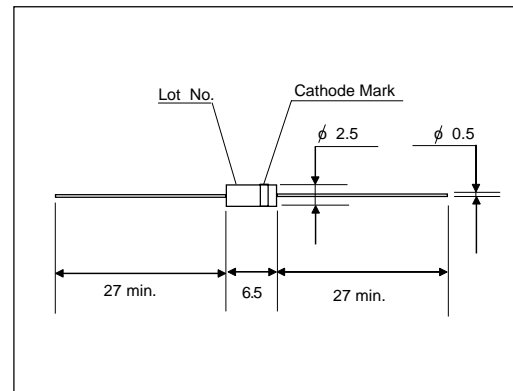
### Applications

- X light Power supply
- Laser
- Voltage doubler circuit
- Microwave emission power

### Maximum Ratings and Characteristics

- Absolute Maximum Ratings

### Outline Drawings : mm



### Cathode Mark

| Type       | Mark |
|------------|------|
| ESJA58-08A |      |

| Items                                | Symbols          | Condition               | ESJA58-08A  | Units             |
|--------------------------------------|------------------|-------------------------|-------------|-------------------|
| Repetitive Peak Reverse Voltage      | $V_{RRM}$        |                         | 8.0         | kV                |
| Average Output Current               | $I_o$            | Ta=25°C, Resistive Load | 5.0         | mA                |
| Surge Current                        | $I_{FSM}$        |                         | 0.5         | A <sub>peak</sub> |
| Junction Temperature                 | T <sub>J</sub>   |                         | 125         | °C                |
| Allowable Operation Case Temperature | T <sub>c</sub>   |                         | 125         | °C                |
| Storage Temperature                  | T <sub>stg</sub> |                         | -40 to +125 | °C                |

### Electrical Characteristics (Ta=25°C Unless otherwise specified)

| Items                         | Symbols         | Conditions                    | ESJA58-08A | Units |
|-------------------------------|-----------------|-------------------------------|------------|-------|
| Maximum Forward Voltage Drop  | $V_F$           | at 25°C, $I_F = I_{F(AV)}$    | 30         | V     |
| Maximum Reverse Current       | IR1             | at 25°C, $V_R = V_{RRM}$      | 2.0        | uA    |
|                               | IR2             | at 100°C, $V_R = V_{RRM}$     | 5.0        | uA    |
| Maximum Reverse Recovery Time | T <sub>rr</sub> | at 25°C                       | 80         | nS    |
| Junction Capacitance          | C <sub>j</sub>  | at 25°C, $V_R = 0V, f = 1MHz$ | 2.0        | pF    |