

# ESJA09

(10kV,12kV/5mA)

## HIGH VOLTAGE DIODE

ESJA09 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

- Ultra high speed switching
- Low VF
- High surge resitivity for CRT discharge
- High reliability design
- Ultra small pakage

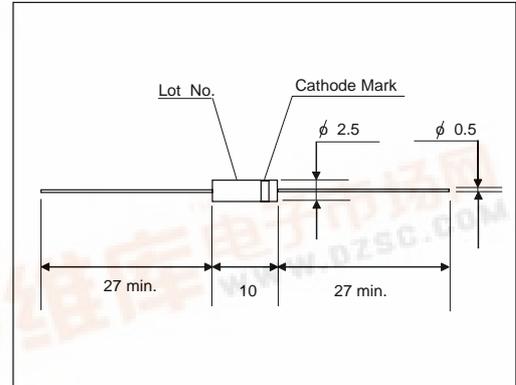
### Applications

- Rectification for CRT display monitor high voltage power supply (FBT:Flyback Transformer)

### Maximum Ratings and Characteristics

- Absolute Maximum Ratings

### Outline Drawings



### Cathode Mark

| Type      | Mark |
|-----------|------|
| ESJA09-10 |      |
| ESJA09-12 |      |

| Items                                | Symbols   | Condition                          | ESJA09      |     | Units       |
|--------------------------------------|-----------|------------------------------------|-------------|-----|-------------|
|                                      |           |                                    | -10         | -12 |             |
| Repetitive Peak Reverse Voltage      | $V_{RRM}$ |                                    | 10          | 12  | kV          |
| Average Output Current               | $I_o$     |                                    | 5           |     | mA          |
| Surge Current                        | $I_{FSM}$ | $T_a=25^{\circ}C$ , Resistive Load | 0.5         |     | A           |
| Junction Temperature                 | $T_j$     | 10mS Sine-half wave peak value     | 120         |     | $^{\circ}C$ |
| Allowable Operation Case Temperature | $T_c$     |                                    | 100         |     | $^{\circ}C$ |
| Storage Temperature                  | $T_{stg}$ |                                    | -40 to +120 |     | $^{\circ}C$ |

- Electrical Characteristics ( $T_a=25^{\circ}C$  Unless otherwise specified)

| Items                         | Symbols  | Conditions                          | ESJA09 |     | Units   |
|-------------------------------|----------|-------------------------------------|--------|-----|---------|
|                               |          |                                     | -10    | -12 |         |
| Maximum Forward Voltage Drop  | $V_F$    | $I_F=10mA$                          |        | 42  | V       |
| Maximum Reverse Current       | $I_R$    | $V_R=V_{RRM}$                       | 2      |     | $\mu A$ |
| Maximum Reverse Recovery Time | $t_{rr}$ | $T_a=25^{\circ}C, I_F=2mA, I_R=4mA$ | 0.05   |     | $\mu s$ |
| Junction Capacitance          | $C_j$    | $T_a=25^{\circ}C, V_r=0V, f=1MHz$   | 1      |     | pF      |



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## Characteristics

