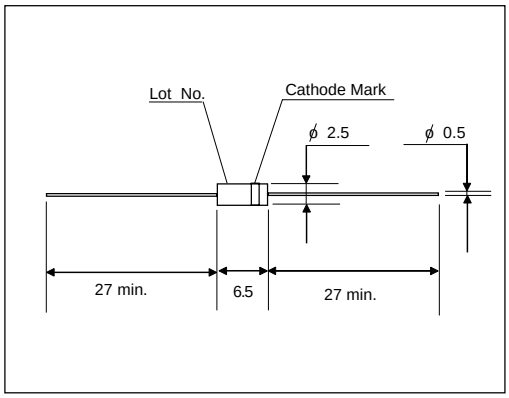
# ESJA08-08 (8kV/5mA)

## HIGH VOLTAGE DIODE

**ESJA08** is high reliability resin molded type high voltage diode in small size package which is sealed a multilayed mesa type silicon chip by epoxy resin.

## ■ Outline Drawings : mm



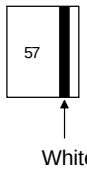

## ■ Features

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

## ■ Applications

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

## ■ Cathode Mark

| Type | Mark |
|---|---|
| ESJA08-08 |  |



## ■ Maximum Ratings and Characteristics

● Absolute Maximum Ratings

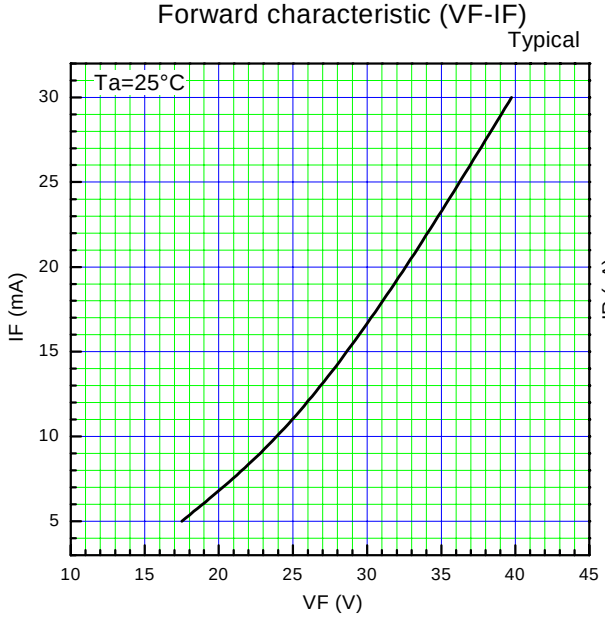
| Items | Symbols | Condition | ESJA08-08 | Units |
|---|---|---|---|---|
| Repetitive Peak Renerse Voltage | $V_{RRM}$ | | **8** | kV |
| Average Output Current | $I_O$ | Ta=25°C,Resistive Load | 5 | mA |
| Suege Current | $I_{FSM}$ | 10mS Sine-half wave peak value | 0.5 | $A_{peak}$ |
| Junction Temperature | $T_j$ | | 120 | °C |
| Allowable Operation Case Temperature | Tc | | 100 | °C |
| Storage Temperature | $T_{stg}$ | | -40 to +120 | °C |

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

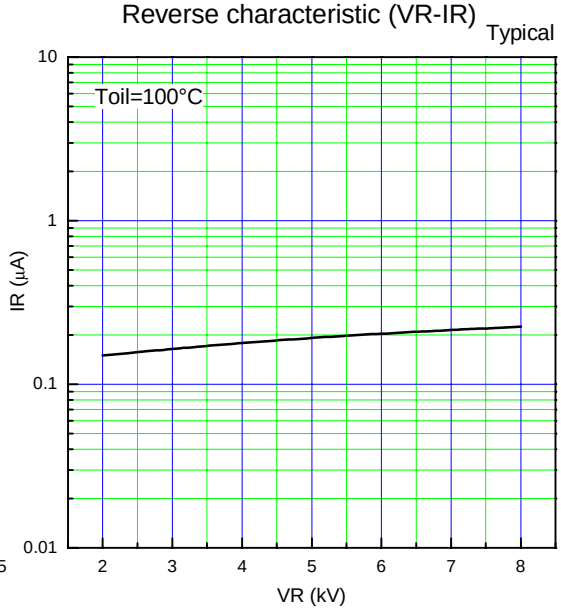
| Items | Symbols | Conditions | ESJA08-08 | Units |
|---|---|---|---|---|
| Maximum Forward Voltage Drop | $V_F$ | at 25°C,$I_F$=10mA | 28 | V |
| Maximum Reverse Current | IR1 | at 25°C,$V_R$=8kV | 2 | μA |
| | IR2 | at 100°C,$V_R$=8kV | 5 | μA |
| Maximum Reverse Recovery Time | trr | at 25°C,$I_F$=2mA,$I_R$=4mA | 0.05 | μs |
| Junction Capacitance | Cj | at 25°C,$V_R$=0V,f=1MHz | 2 | pF |

## ■ Characteristics

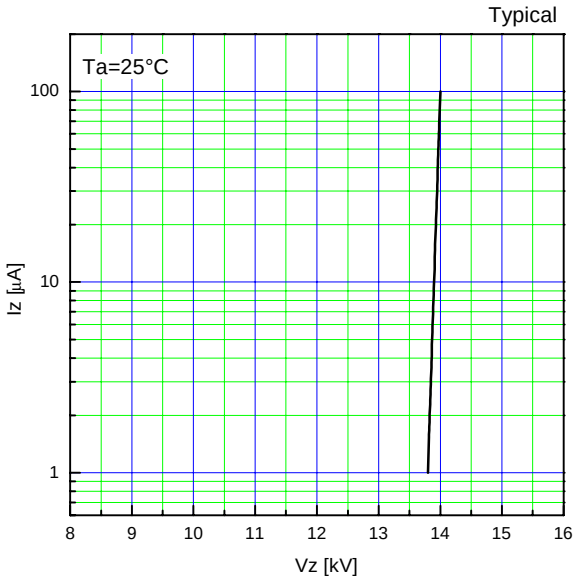
Forward characteristic (VF-IF)




Reverse characteristic (VR-IR)




Avalanche characteristic (Vz-Iz)




Reverse recovery time characteristic (Ta-trr)