

HIGH VOLTEGE DIODE

ESJC35 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.

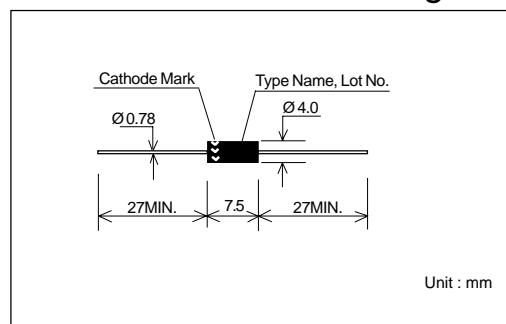
■ Features

- Low VF
- High reliability .
- High speed switching

■ Applications

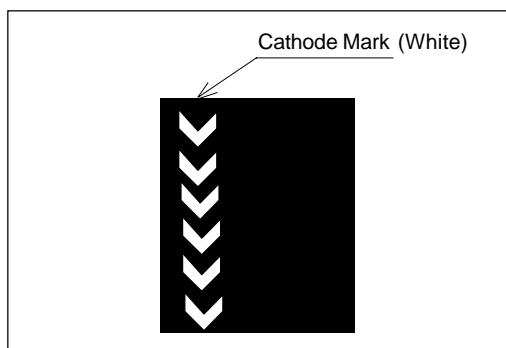
- Rectification for X-ray generator high voltage power supply

■ Outline Drawings



Unit : mm

■ Cathode Mark



■ Maximum Ratings and Characteristics

• Absolute Maximum Ratings

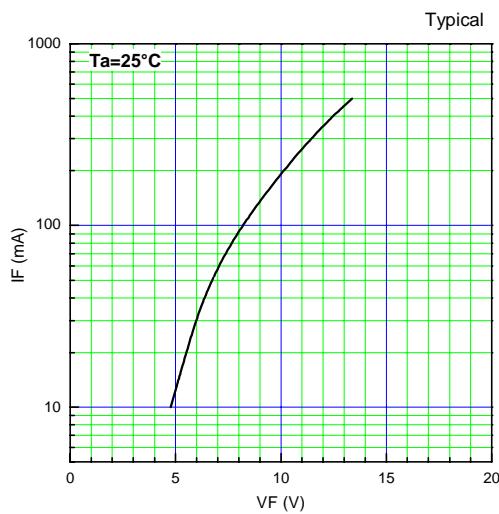
| Items | Symbols | Conditions | ESJC35-08 | Units |
|-------------------------------------|-----------|--|-------------|--------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | | 8.0 | kV |
| Average Forward Current | I_o | $T_{oil}=25^{\circ}\text{C}$, Resistive Load | 410 | mA |
| Non-repetitive Peak Forward Current | I_{FSM} | 50Hz.sine half-wave peak value. One-shot. $T_a=25^{\circ}\text{C}$ | 10 | A |
| Allowable Junction Temperature | T_j | | 120 | $^{\circ}\text{C}$ |
| Storage Temperature Range | T_{stg} | | -40 to +120 | $^{\circ}\text{C}$ |

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

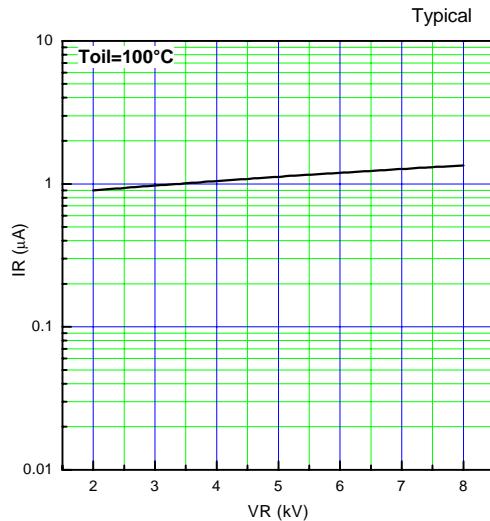
| Items | Symbols | Conditions | ESJC35-08 | Units |
|-------------------------------|----------|---|-----------|---------------|
| Maximum Forward Voltage Drop | V_F | at 25°C , $I_F=1\text{A}$ | 20 | V |
| Maximum Reverse Current | I_{R1} | at 25°C , $VR=8.0\text{kV}$ | 2 | μA |
| | I_{R2} | at 100°C , $VR=8.0\text{kV}$ | 10 | |
| Minimum Reverse Recovery Time | t_{rr} | at 25°C , $IF=IR=100\text{mA}$ 90%Recovery | 0.15 | μs |

■ Characteristics

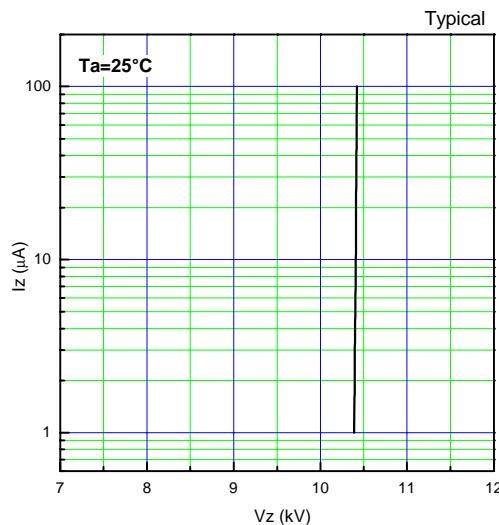
Forward characteristic [VF-IF]



Reverse characteristic [VR-IR]



Avalanche characteristic [Vz-Iz]



Reverse recovery time characteristic [Ta-trr]

