

HV500F 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
- Low VF
- High surge resistivity for CRT discharge
- High reliability design
- Ultra small package

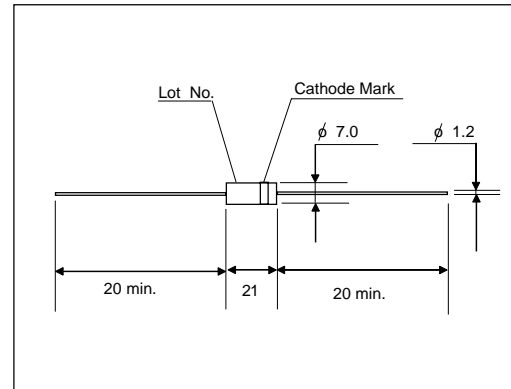
Applications

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

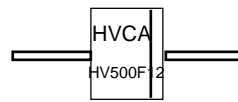
Maximum Ratings and Characteristics

- Absolute Maximum Ratings

Outline Drawings : mm



Cathode Mark

| Type | Mark |
|----------|-------------------------------------------------------------------------------------|
| HV500F12 |  |

| Items | Symbols | Condition | HV500F12 | Units |
|--------------------------------------|------------------|-------------------------|-------------|-------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | | 12 | kV |
| Average Output Current | I_o | Ta=25°C, Resistive Load | 450 | mA |
| Surge Current | I_{FSM} | | 25 | A _{peak} |
| Junction Temperature | T _J | | 155 | °C |
| Allowable Operation Case Temperature | T _c | | 125 | °C |
| Storage Temperature | T _{stg} | | -40 to +155 | °C |

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

| Items | Symbols | Conditions | HV500F12 | Units |
|-------------------------------|-----------------|---------------------------------------------|----------|-------|
| Maximum Forward Voltage Drop | V_F | at 25°C, I _F =I _{F(AV)} | 18 | V |
| Maximum Reverse Current | IR1 | at 25°C, V _R =V _{RRM} | 5.0 | μA |
| | IR2 | at 100°C, V _R =V _{RRM} | 50 | μA |
| Maximum Reverse Recovery Time | T _{rr} | at 25°C | 100 | nS |
| Junction Capacitance | C _j | at 25°C, V _R =0V, f=1MHz | 15 | pF |