

## 16kV 5mA HIGH VOLTAGE DIODES

The SHV series of diodes have been miniaturized by resin on the assumption of remolding. Measures against creeping discharge and humidity stress must be taken when using these diodes.

### Features

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

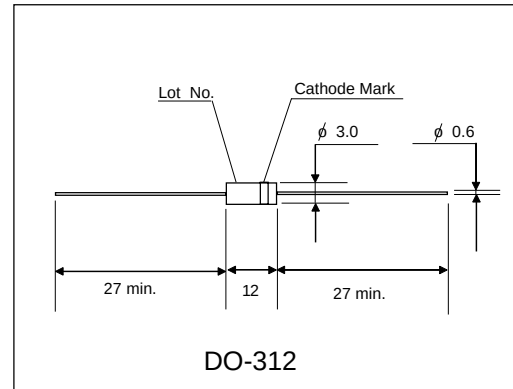
### Applications

- 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 |
|--------|------|
| SHV-16 |      |

| Items                                | Symbols   | Condition                                 | SHV-16      | Units              |
|--------------------------------------|-----------|-------------------------------------------|-------------|--------------------|
| Repetitive Peak Reverse Voltage      | $V_{RRM}$ |                                           | 16          | kV                 |
| Average Output Current               | $I_O$     | $T_a=25^{\circ}\text{C}$ , Resistive Load | 5.0         | mA                 |
| Surge Current                        | $I_{FSM}$ |                                           | 0.5         | A peak             |
| Junction Temperature                 | $T_J$     |                                           | 120         | $^{\circ}\text{C}$ |
| Allowable Operation Case Temperature | $T_c$     |                                           | 120         | $^{\circ}\text{C}$ |
| Storage Temperature                  | $T_{stg}$ |                                           | -40 to +120 | $^{\circ}\text{C}$ |

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

| Items                         | Symbols  | Conditions                                                  | SHV-16 | Units         |
|-------------------------------|----------|-------------------------------------------------------------|--------|---------------|
| Maximum Forward Voltage Drop  | $V_F$    | at $25^{\circ}\text{C}$ , $I_F = I_{F(AV)}$                 | 43     | V             |
| Maximum Reverse Current       | $I_{R1}$ | at $25^{\circ}\text{C}$ , $V_R = V_{RRM}$                   | 2.0    | $\mu\text{A}$ |
|                               | $I_{R2}$ | at $100^{\circ}\text{C}$ , $V_R = V_{RRM}$                  | 5.0    | $\mu\text{A}$ |
| Maximum Reverse Recovery Time | $T_{rr}$ | at $25^{\circ}\text{C}$                                     | 100    | nS            |
| Junction Capacitance          | $C_j$    | at $25^{\circ}\text{C}$ , $V_R=0\text{V}$ , $f=1\text{MHz}$ | 1.0    | pF            |