

## 12kV 5mA HIGH VOLTAGE DIODES

The SHV series of diodes have been miniaturized by resin on the assumption for 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

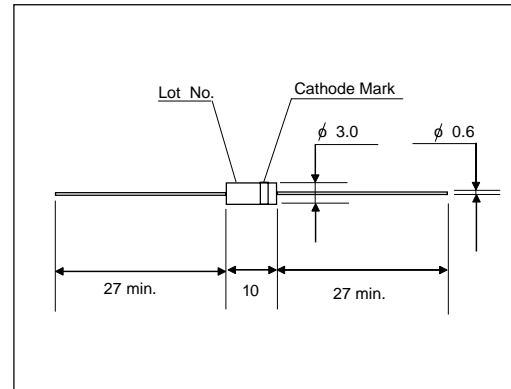
### Applications

- 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-12	

Items	Symbols	Condition	SHV-12	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$		12	kV
Average Output Current	$I_o$	Ta=25°C, Resistive Load	5.0	mA
Surge Current	$I_{FSM}$		0.5	A <sub>peak</sub>
Junction Temperature	T <sub>J</sub>		120	°C
Allowable Operation Case Temperature	T <sub>c</sub>		120	°C
Storage Temperature	T <sub>stg</sub>		-40 to +120	°C

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

Items	Symbols	Conditions	SHV-12	Units
Maximum Forward Voltage Drop	$V_F$	at 25°C, $I_F = I_{F(AV)}$	35	V
Maximum Reverse Current	IR1	at 25°C, $V_R = V_{RRM}$	2.0	uA
	IR2	at 100°C, $V_R = V_{RRM}$	5.0	uA
Maximum Reverse Recovery Time	T <sub>rr</sub>	at 25°C	100	nS
Junction Capacitance	C <sub>j</sub>	at 25°C, $V_R = 0V, f = 1MHz$	1.0	pF