

12kV 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

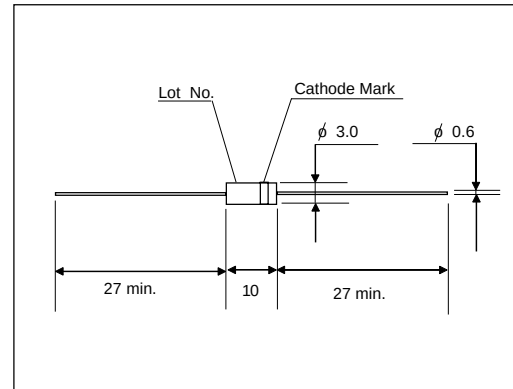
Applications

- 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-12	

Items	Symbols	Condition	SHV-12	Units
Repetitive Peak Reverse Voltage	V_{RRM}		12	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-12	Units
Maximum Forward Voltage Drop	V_F	at 25°C , $I_F = I_{F(AV)}$	35	V
Maximum Reverse Current	I_{R1}	at 25°C , $V_R = V_{RRM}$	2.0	μA
	I_{R2}	at 100°C , $V_R = V_{RRM}$	5.0	μA
Maximum Reverse Recovery Time	T_{rr}	at 25°C	100	nS
Junction Capacitance	C_j	at 25°C , $V_R=0\text{V}$, $f=1\text{MHz}$	1.0	pF