

12kV 30mA HIGH VOLTAGE DIODES

HVRT 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

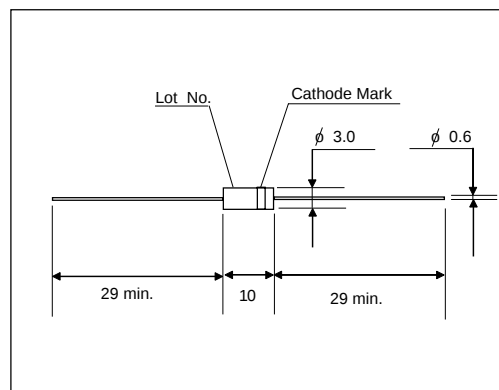
Applications

- 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
HVRT120	

Items	Symbols	Condition	HVRT120	Units
Repetitive Peak Reverse Voltage	V_{RRM}		12	kV
Average Output Current	I_o	$T_a=25^{\circ}\text{C}$, Resistive Load	30	mA
Surge Current	I_{FSM}	10ms Sine-half wave peak value	3.0	A_{peak}
Junction Temperature	T_j		125	$^{\circ}\text{C}$
Allowable Operation Case Temperature	T_c		100	$^{\circ}\text{C}$
Storage Temperature	T_{stg}		-40 to +125	$^{\circ}\text{C}$

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

Items	Symbols	Conditions	HVRT120	Units
Maximum Forward Voltage Drop	V_F	at 25°C , $I_F = I_{F(AV)}$	25	V
Maximum Reverse Current	I_{R1}	at 25°C , $V_R=12\text{kV}$	2.0	μA
	I_{R2}	at 100°C , $V_R=12\text{kV}$	20	μA
Maximum Reverse Recovery Time	T_{rr}	at 25°C , $I_F=2\text{mA}$, $I_R=4\text{mA}$	100	nS
Junction Capacitance	C_j	at 25°C , $V_R=0\text{V}$, $f=1\text{MHz}$	1.0	pF