

## 40kV 30mA HIGH VOLTAGE DIODE

HVRL400 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

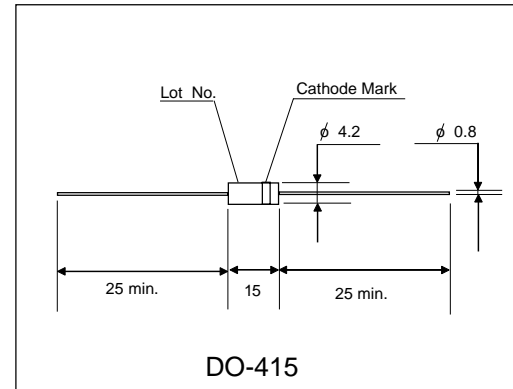
### Applications

- 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
HVRL400	

Items	Symbols	Condition	HVRL400	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$		40	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	5.0	$A_{peak}$
Junction Temperature	$T_j$		125	$^{\circ}\text{C}$
Allowable Operation Case Temperature	$T_c$		125	$^{\circ}\text{C}$
Storage Temperature	$T_{stg}$		-40 to +125	$^{\circ}\text{C}$

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

Items	Symbols	Conditions	HVRL400	Units
Maximum Forward Voltage Drop	$V_F$	at $25^{\circ}\text{C}$ , $I_F=I_{F(AV)}$	50	V
Maximum Reverse Current	$I_{R1}$	at $25^{\circ}\text{C}$ , $V_R=40\text{kV}$	2.0	$\mu\text{A}$
	$I_{R2}$	at $100^{\circ}\text{C}$ , $V_R=40\text{kV}$	20	$\mu\text{A}$
Maximum Reverse Recovery Time	$T_{rr}$	at $25^{\circ}\text{C}$ , $I_F=2\text{mA}$ , $I_R=4\text{mA}$	100	nS
Junction Capacitance	$C_j$	at $25^{\circ}\text{C}$ , $V_R=0\text{V}$ , $f=1\text{MHz}$	1.0	pF