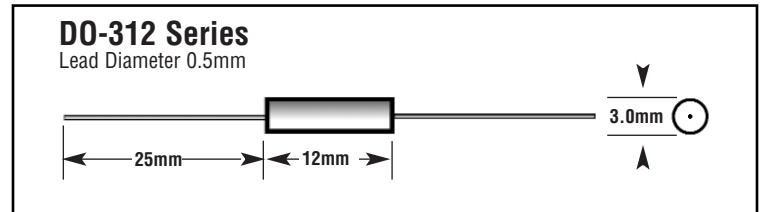
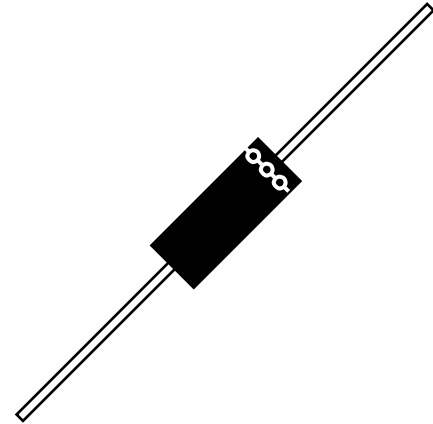




High reliability resin molded type high voltage diode in small size package which is sealed a multilayered mesa type silicon chip by epoxy resin.

### ■ Outline Drawings :



### ■ Features

- High speed switching
- Epoxy resin molded in vacuum, Have anticorrosion in the surface
- High surge resistivity for CRT discharge
- High reliability design
- Avalanche characteristic

### ■ Applications

- X light Power supply
- Laser
- Voltage doubler circuit
- Microwave emission power
- General purpose high voltage rectifier, Voltage multiplier assembly.

### ■ Maximum Ratings and Characteristics

- Absolute Maximum Ratings

Items	Symbols	Condition	HV10G18	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$	$T_a=25^{\circ}\text{C}$ ,	18	kV
Average Output Current	$I_o$	$T_a=25^{\circ}\text{C}$ , Resistive Load	10	mA
Surge Current	$I_{FSM}$	$T_a=25^{\circ}\text{C}$ , 8.3 ms	1.0	A <sub>peak</sub>
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	HV10G18	Units
Maximum Forward Voltage Drop	$V_F$	at $25^{\circ}\text{C}$ , $I_F = I_{F(AV)}$	45	V
Maximum Reverse Current	IR1	at $25^{\circ}\text{C}$ , $V_R = V_{RRM}$	2.0	$\mu\text{A}$
	IR2	at $100^{\circ}\text{C}$ , $V_R = V_{RRM}$	5.0	$\mu\text{A}$
Maximum Reverse Recovery Time	$T_{rr}$	at $25^{\circ}\text{C}$ ; $I_F = 2\text{mA}$ ; $I_R = 4\text{mA}$ ; $I_{rr} = 1\text{mA}$ ;	100	nS
Junction Capacitance	$C_j$	at $25^{\circ}\text{C}$ ; $V_R = 0\text{V}$ , $f = 1\text{MHz}$	1.0	pF



■ Typical characteristics:

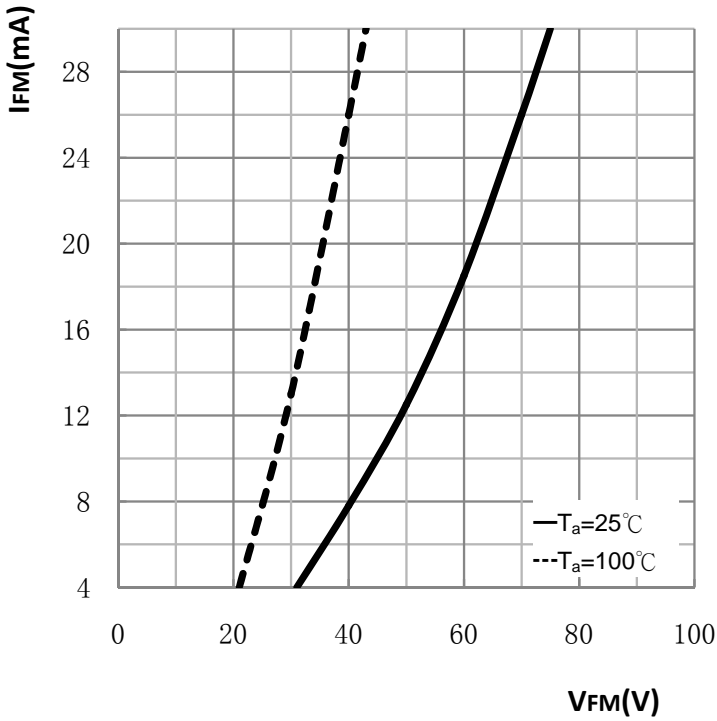


Figure 1. Forward characteristics

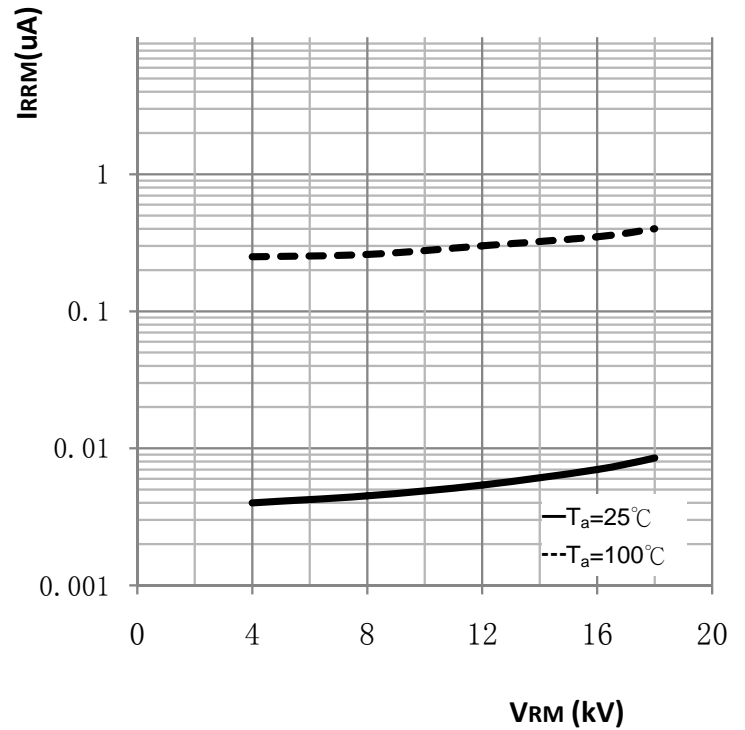


Figure 2. Reverse characteristics

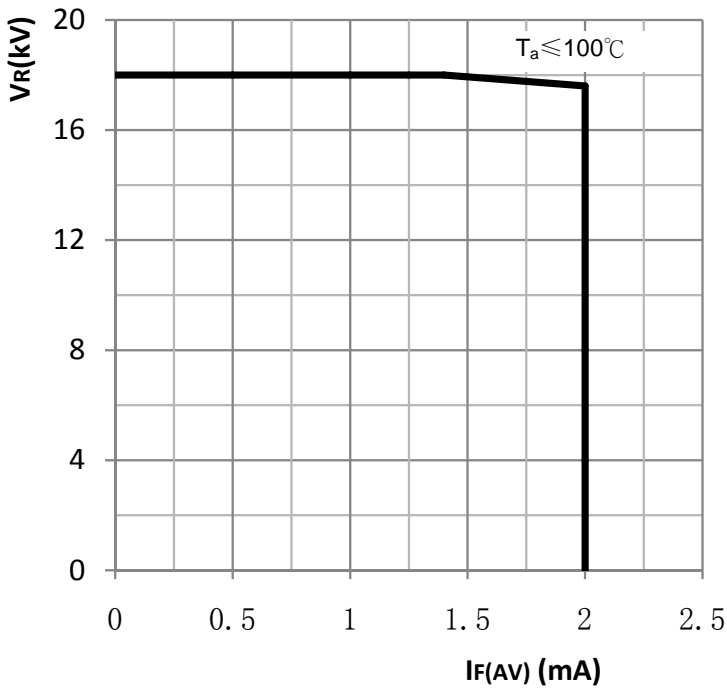


Figure 3.  $V_R$ - $I_{F(AV)}$  Curve

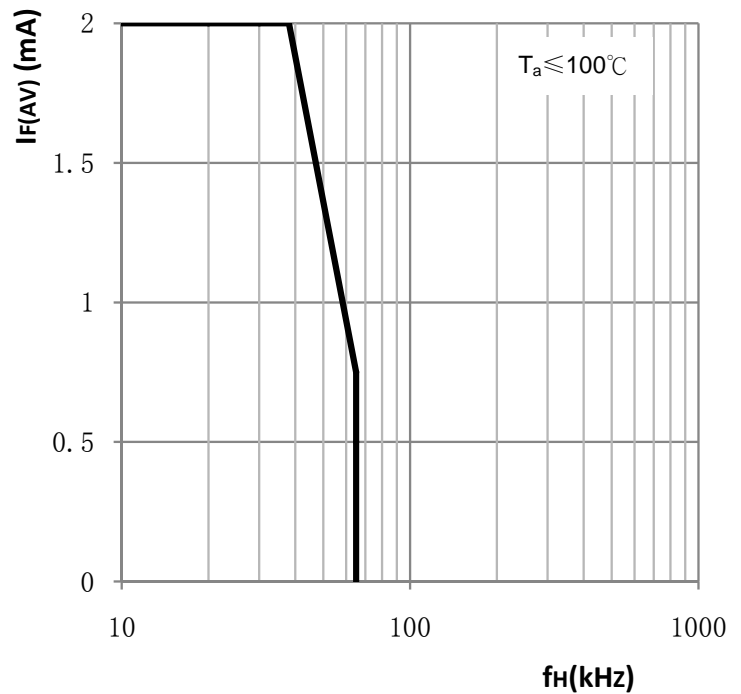


Figure 4.  $I_{F(AV)}$ - $f_H$  Curve