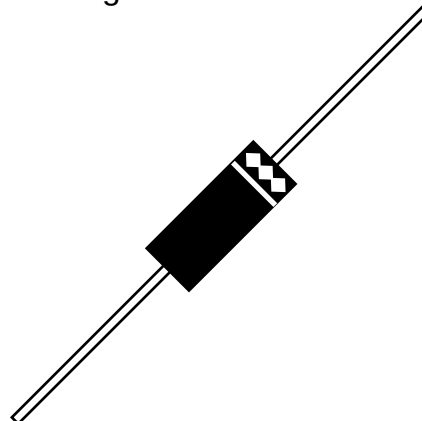


High reliability resin molded type high voltage diode in small size package which is sealed a multilayered mesa type silicon chip by epoxy resin.

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.

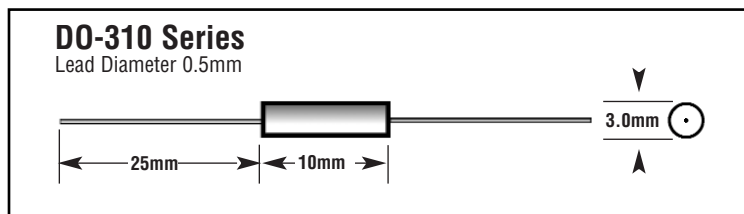
Maximum Ratings and Characteristics

- Absolute Maximum Ratings

Items	Symbols	Condition	HV10G12	Units
Repetitive Peak Reverse Voltage	V_{RRM}	$T_a=25^{\circ}\text{C}$,	12	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 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	HV10G12	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 ; $I_F = 2\text{mA}$; $I_R = 4\text{mA}$; $I_{rr} = 1\text{mA}$;	100	nS
Junction Capacitance	C_j	at 25°C ; $V_R = 0\text{V}$, $f = 1\text{MHz}$	1.0	pF





■ Typical characteristics:

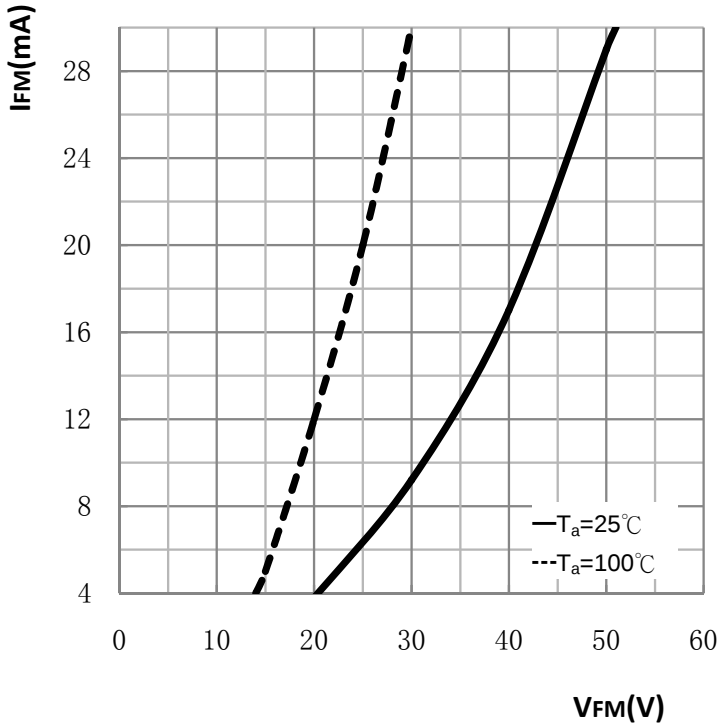


Figure 1. Forward characteristics

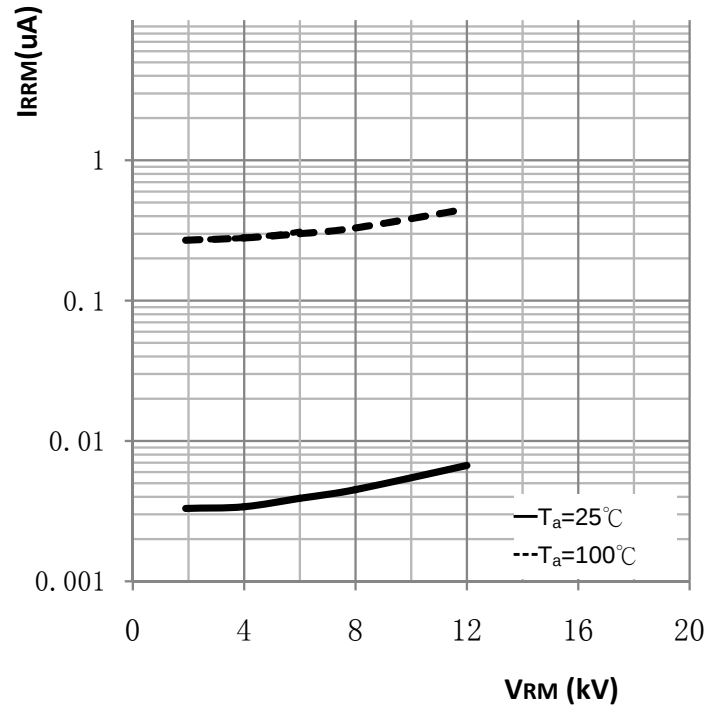


Figure 2. Reverse characteristics

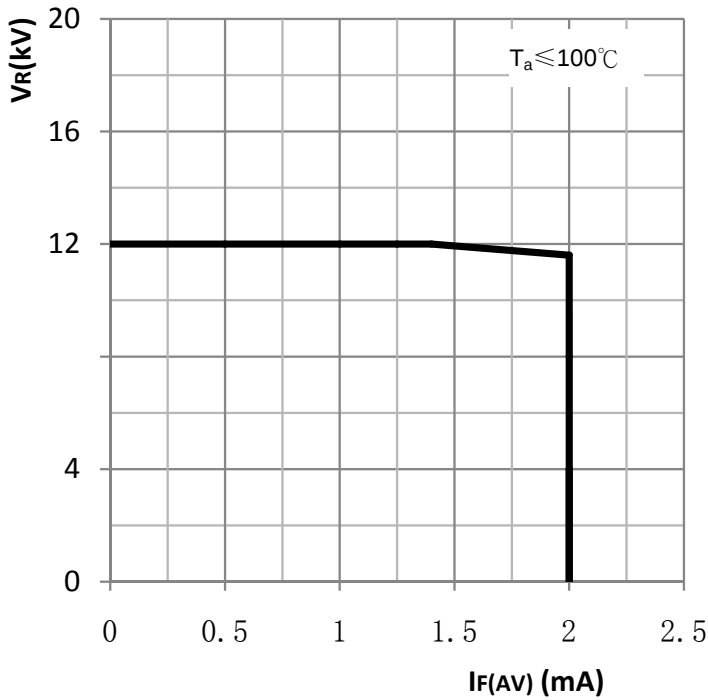


Figure 3. V_R - $I_F(AV)$ Curve

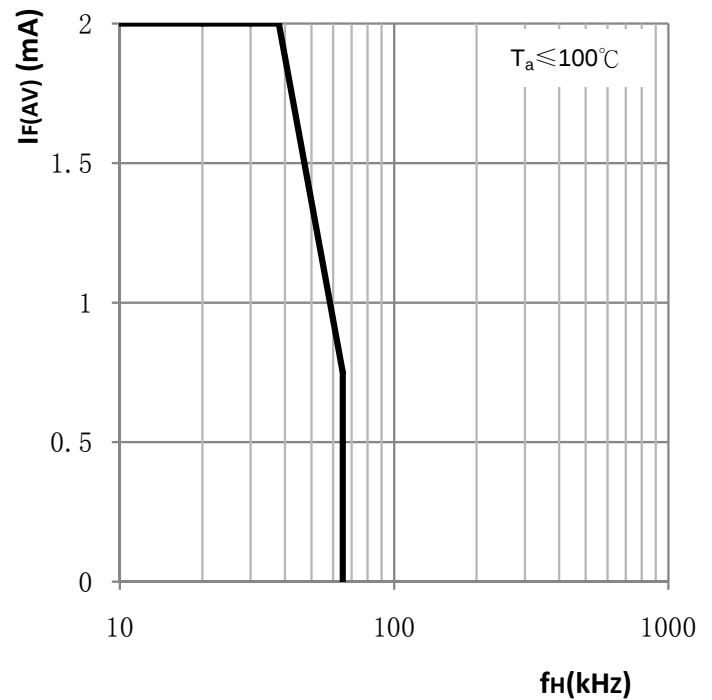


Figure 4. $I_F(AV)$ - f_H Curve