

HVGT High voltage silicon rectifier diodes is made of high quality glass passivated chip and high reliability epoxy resin sealing structure, and through professional testing equipment inspection qualified after to customers.

### SHAPE DISPLAY:



### FEATURES:

1. High reliability design.
2. High voltage design.
3. High frequency .
4. Conform to RoHS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.

### APPLICATIONS:

1. High voltage multiplier circuit
2. Electrostatic generator circuit .
3. General purpose high voltage rectifier.
4. Other.

### MECHANICAL DATA:

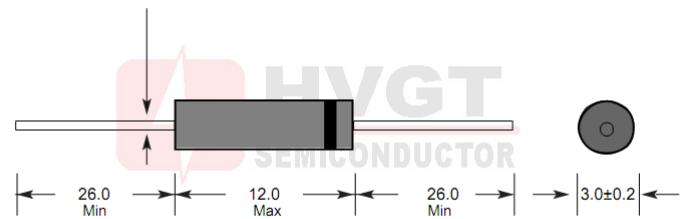
1. Case: epoxy resin molding.
2. Terminal: welding axis.
3. Net weight: 0.32 grams (approx).

SIZE: (Unit:mm)

HVGT NAME: DO-312

### DO-312 Series

Lead Diameter 0.6mm



Unit:mm

### MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)

Items	Symbols	Condition	Data Value	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$	$T_a=25^{\circ}C$ ;	18	kV
Average Output Current	$I_F$	$T_a=25^{\circ}C$ ;Resistive Load	5.0	mA
Suege Current	$I_{FSM}$	$T_a=25^{\circ}C$ ; 1/2 Sine(60Hz)	0.5	A
Junction Temperature	$T_J$		-40~+125	$^{\circ}C$
Allowable Operation Case Temperature	$T_C$		125	$^{\circ}C$
Storage Temperature	$T_{STG}$		-40~+125	$^{\circ}C$

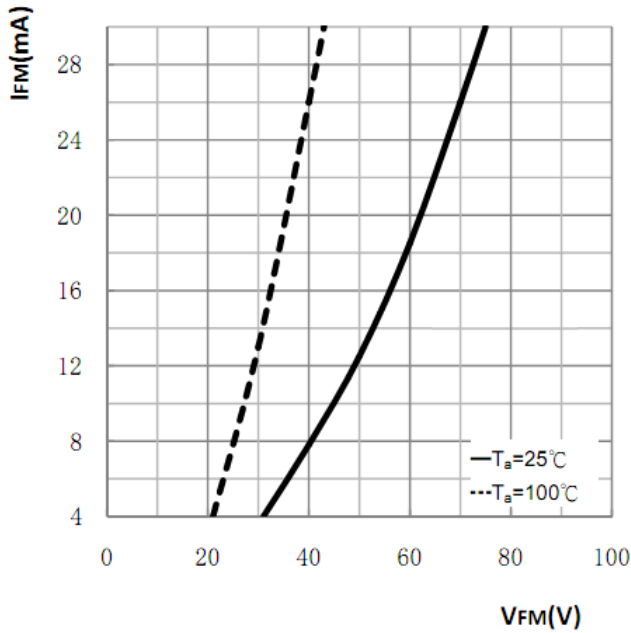
### ELECTRICAL CHARACTERISTICS: $T_a=25^{\circ}C$ (Unless otherwise specified)

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	$V_F$	at $25^{\circ}C$ ; at $I_{F(AV)}$	50	V
Maximum Reverse Current	$I_{R1}$	at $25^{\circ}C$ ; at $V_{RRM}$	2.0	$\mu A$
	$I_{R2}$	at $100^{\circ}C$ ; at $V_{RRM}$	5.0	$\mu A$
Maximum Reverse Recovery Time	$T_{RR}$	at $25^{\circ}C$ ; $I_F=0.5I_R$ ; $I_R=I_{FAVM}$ ; $I_{RR}=0.25I_R$	80	nS
Junction Capacitance	$C_J$	at $25^{\circ}C$ ; $V_R=0V$ ; $f=1MHz$	1.0	pF



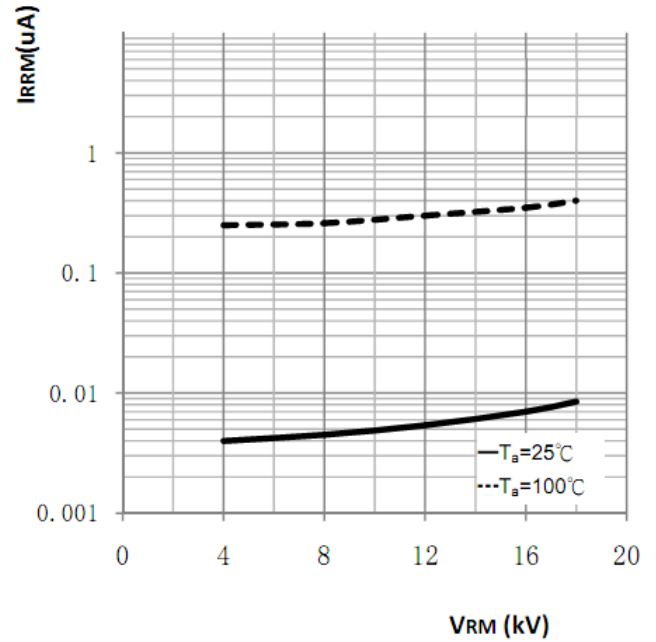
**Fig1**

**Forward Characteristics**



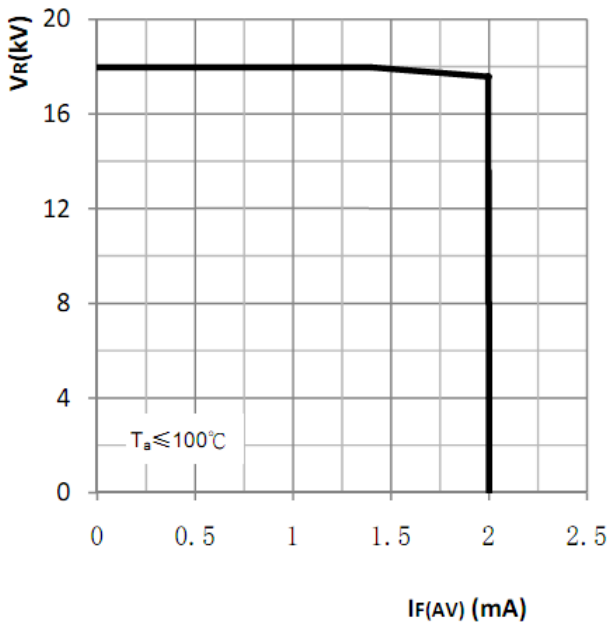
**Fig2**

**Reverse Characteristics**



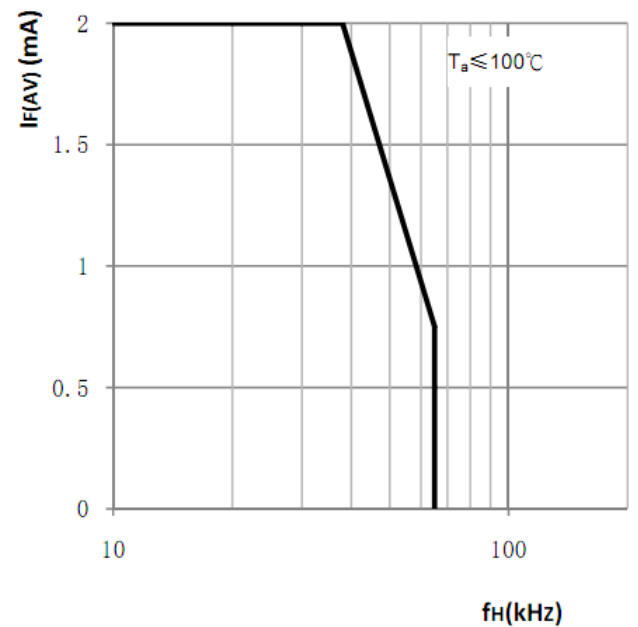
**Fig3**

**VR-IF(AV) Curve**



**Fig4**

**IF(AV)-fH Curve**



**Marking**

**Type**

ESJA53-18

**Code**

**Cathode Mark**

