



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:

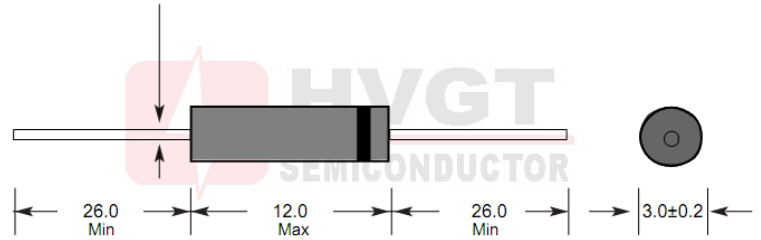
1. Case: epoxy resin molding.
2. Terminal: welding axis.
3. Net weight: 0.45 grams (approx).

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 Rense Voltage	$V_{RRM}$	$T_a=25^{\circ}C;$	20	kV
Average Output Current	$I_F$	$T_a=55^{\circ}C;$ Resistive Load	55	mA
Suege Current	$I_{FSM}$	$T_a=25^{\circ}C;$ 1/2 Sine(60Hz)	3.0	A
Junction Temperature	$T_J$		-40~+125	$^{\circ}C$
Allowable Operation Case Temperature	$T_c$		125	$^{\circ}C$
Storage Temperature	$T_{STG}$		-40~+125	$^{\circ}C$

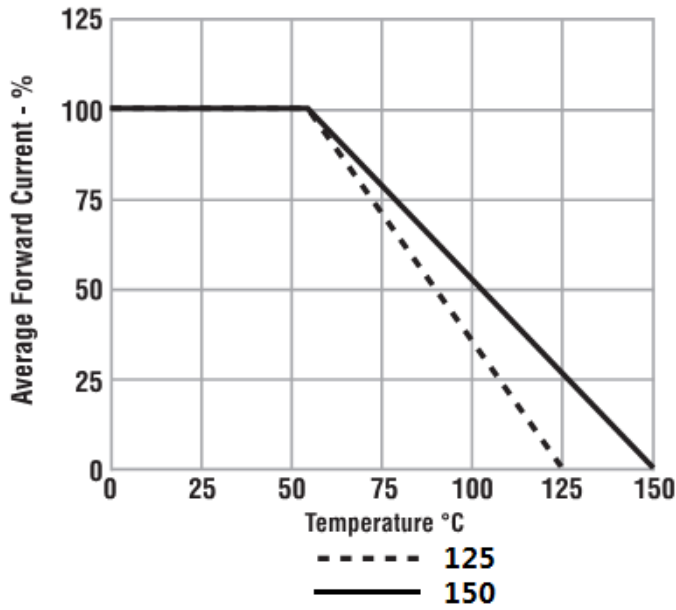
### ELECTRICAL CHARACTERISTICS: $T_a=25^{\circ}C$ (Unless otherwise specified)

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	$V_F$	at $25^{\circ}C;$ at $I_{F(AV)}$	35	V
Maximum Reverse Current	$I_{R1}$	at $25^{\circ}C;$ at $V_{RRM}$	1.0	$\mu A$
	$I_{R2}$	at $100^{\circ}C;$ at $V_{RRM}$	20	$\mu A$
Maximum Reverse Recovery Time	$T_{RR}$	at $25^{\circ}C;$ $I_F=0.5I_R;$ $I_R=I_{FAVM};$ $I_{RR}=0.25I_R$	100	nS
Junction Capacitance	$C_J$	at $25^{\circ}C;$ $V_R=0V;$ $f=1MHz$	1.0	pF



**Fig 1**

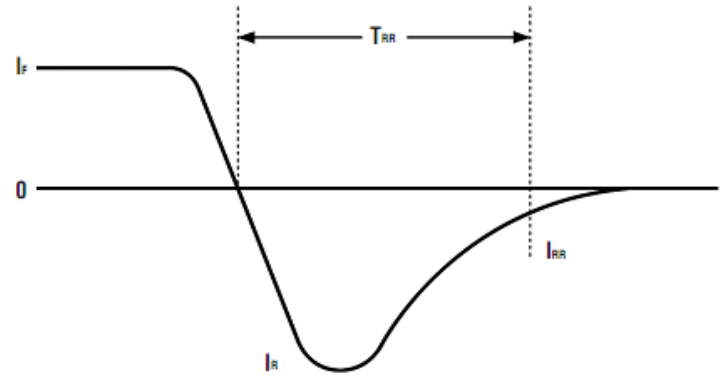
**Forward Current Derating Curve**



This applies to most diodes in our catalog that show average current rating at 55°C unless otherwise specified.  
Max operating temperature is 150°C unless otherwise specified.

**Fig 2**

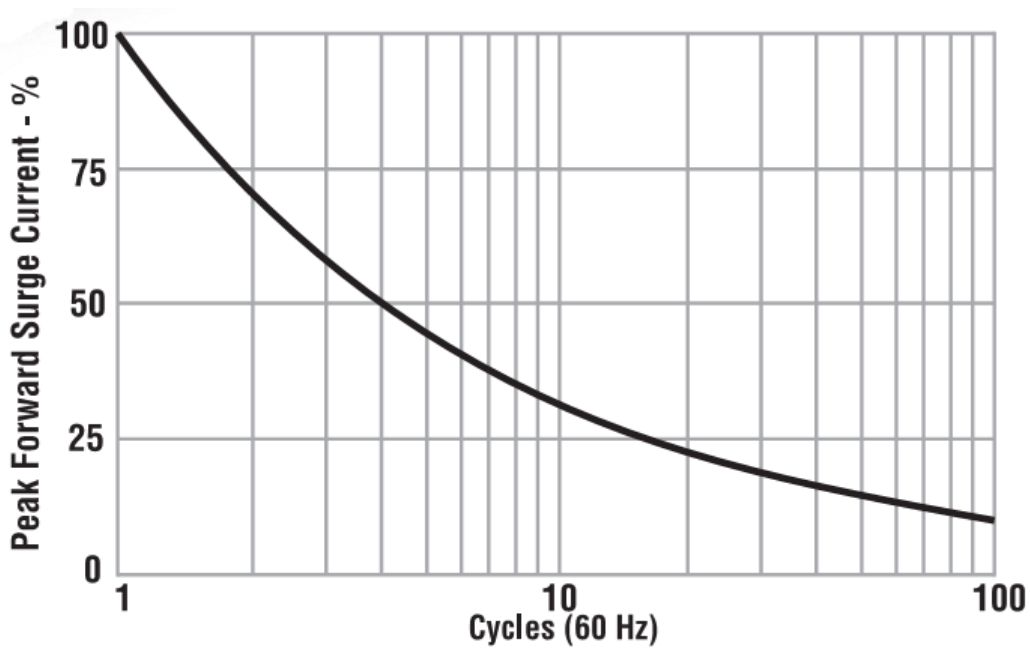
**Reverse Recovery Measurement Waveform**



Typical data capture points:  $I_F = 0.5I_R$ ,  $I_R, I_{RR} = 0.25I_R$

**Fig 3**

**Repetitive Surge Current**



**Marking**

Type

HV55G20

Code

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Cathode Mark

