



HVGT High voltage silicon rectifier 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 design..
4. Conform to RoHS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.

**APPLICATIONS:**

1. High frequency switching power supply.
2. Power supply of laser equipment .
3. General purpose high voltage rectifier.
4. Other.

**MECHANICAL DATA:**

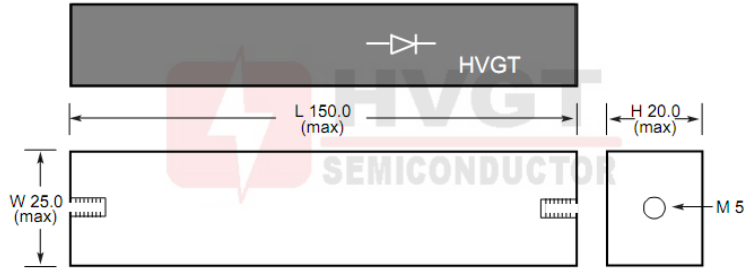
1. Case: epoxy resin molding.
2. Terminal: external lead.
3. Net weight: 144 grams (approx).

**SIZE: (Unit:mm)**

**HVGT NAME: HVC-152520**

**HVC-152520 Series**

Screw Holes M5



Unit:mm

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

Items	Symbols	Condition	Data Value	Units
Repetitive Peak Rense Voltage	$V_{RRM}$	$T_a=25^{\circ}C;$	100	kV
Average Output Current	$I_F$	$T_a=40^{\circ}C;$ Resistive Load	1.0	A
Suege Current	$I_{FSM}$	$T_a=25^{\circ}C;$ 8.3 mS; 1/2 Sine(60Hz)	30	A
Junction Temperature	$T_J$		-40~+125	$^{\circ}C$
Allowable Operation Case Temperature	$T_c$		125	$^{\circ}C$
Storage Temperature	$T_{STG}$		-40~+125	$^{\circ}C$

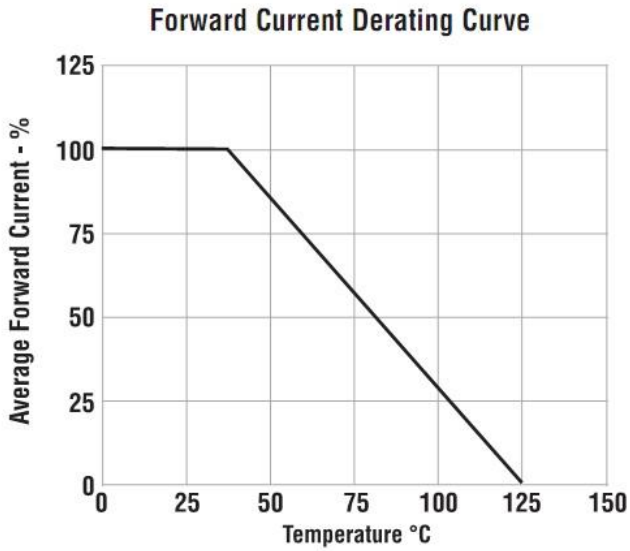
**ELECTRICAL CHARACTERISTICS:  $T_a=25^{\circ}C$  (Unless otherwise specified)**

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	$V_F$	at $25^{\circ}C;$ $I_F = I_{F(AV)}$	120	V
Maximum Reverse Current	$I_{R1}$	at $25^{\circ}C;$ $V_R = V_{RRM}$	5.0	$\mu A$
	$I_{R2}$	at $100^{\circ}C;$ $V_R = V_{RRM}$	50	$\mu A$
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 $25^{\circ}C;$ $V_R=0V;$ $f=1MHz$	--	pF



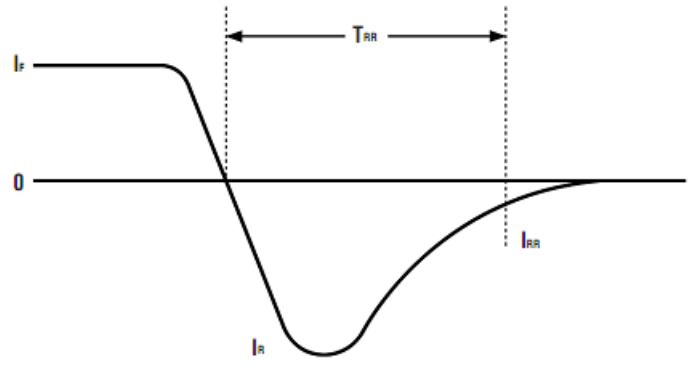
**Fig 1**

**Forward Current Derating Curve**



**Fig 2**

**Reverse Recovery Measurement Waveform**



Typical data capture points:  $I_F = 0.5I_R$ ,  $I_R, I_{RR} = 0.25I_R$   
 $I_R$  is typically the rated average forward current maximum ( $I_{FAVM}$ ) of the D.U.T

**Fig 3**

**Non-Repetitive Surge Current**

