HVGT SEMICONDUCTOR

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.

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.
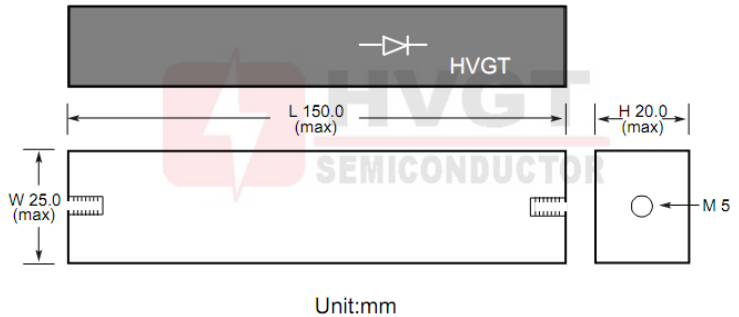
APPLICATIONS:

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: 130 grams (approx).

SHAPE DISPLAY:

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 Renerse Voltage	V_{RRM}	Ta=25°C;	40	kV
Average Output Current	I_F	Ta=40°C;Resistive Load	1.0	A
Suege Current	I_{FSM}	Ta=25°C; 8.3 mS; 1/2 Sine(60Hz)	30	A
Junction Temperature	T_J		-40~+125	°C
Allowable Operation Case Temperature	Tc		125	°C
Storage Temperature	T_{STG}		-40~+125	°C

ELECTRICAL CHARACTERISTICS: Ta=25°C (Unless otherwise specified)

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	V_F	at 25°C;$I_F = I_{F(AV)}$	48	V
Maximum Reverse Current	I_R1	at 25°C;$V_R = V_{RRM}$	5.0	uA
	I_R2	at 100°C;$V_R = V_{RRM}$	50	uA
Maximum Reverse Recovery Time	T_{RR}	at 25°C; $I_F=0.5I_R$; $I_R=I_{FAVM}$; $I_{RR}=0.25I_R$	100	nS
Junction Capacitance	C_J	at 25°C; $V_R=0V$; f=1MHz	--	pF
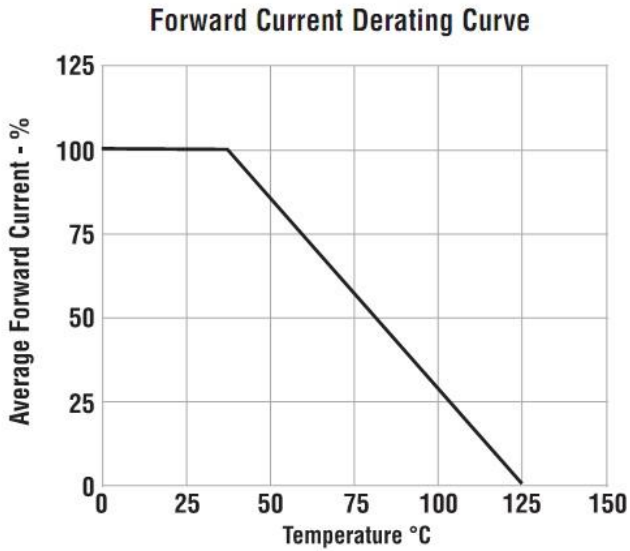
Fig 1	Fig 2
Forward Current Derating Curve	Reverse Recovery Measurement Waveform

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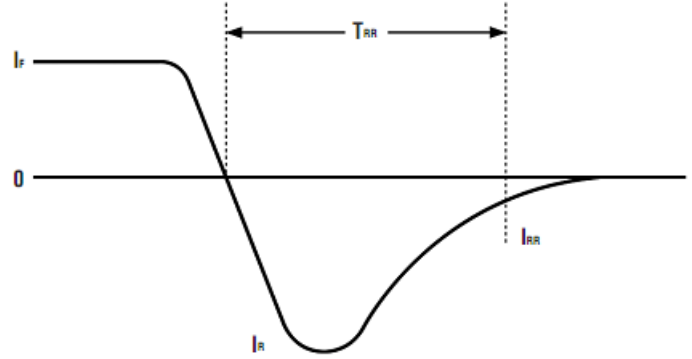
Typical data capture points: $I_F = 0.5I_R$, I_R, $I_{RR} = 0.25I_R$

I_R is typically the rated average forward current maximum (I_{FAVM}) of the D.U.T

Fig 3

Non-Repetitive Surge Current