

**INTRODUCE:**

HVGT high voltage silicon rectifier assembly is made of high quality silicon wafer 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. Power frequency ratio.
4. Conform to RoHS and SGS.
5. Epoxy resin molded in vacuum Have anticorrosion in the surface.

**APPLICATIONS:**

1. High voltage generator.
2. Industrial microwave power supply.
3. High voltage rectifier used in electrostatic cleaning.

**MECHANICAL DATA:**

1. Case: epoxy resin molding.
2. Terminal: screw holes M5.
3. Net weight: 145.0 grams (approx).

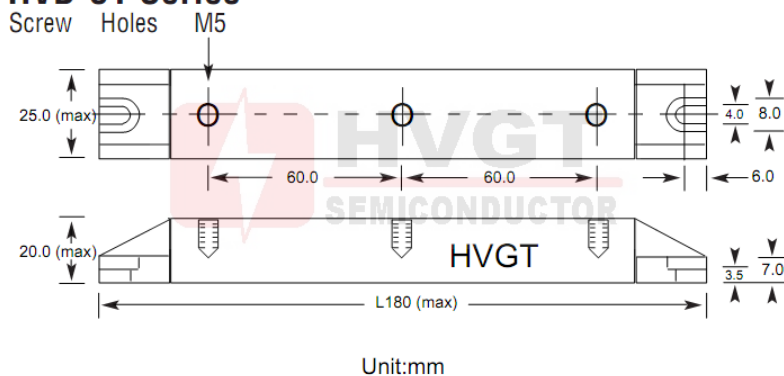
**SHAPE DISPLAY:**



**SIZE: (Unit:mm)**

**HVGT NAME: HVD-31**

**HVD-31 Series**



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

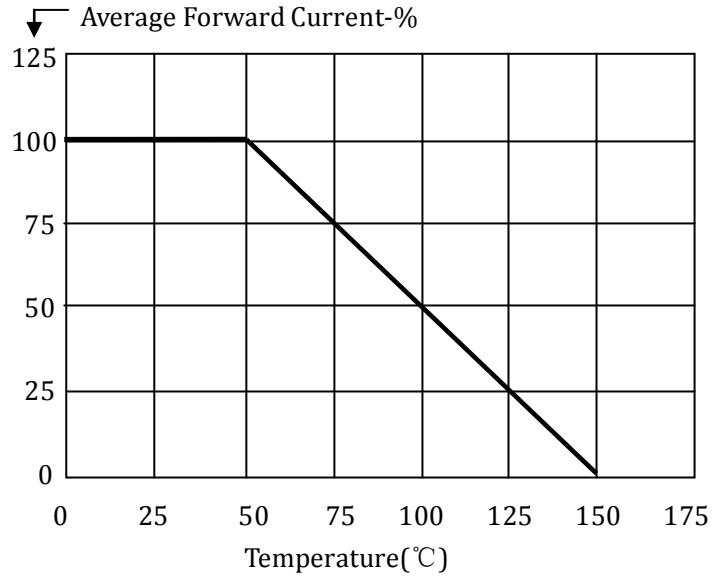
Items	Symbols	Condition	Data Value	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$	$T_A=25^{\circ}C; I_R=1.0\mu A$	36	kV
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	$T_A=25^{\circ}C; I_R=1.0\mu A$	40	kV
Average Forward Current Maximum	$I_{FAVM}$	$T_A=50^{\circ}C; 50Hz$ Half-sine Wave; Resistance load	1.0	A
Non-Repetitive Forward Surge Current	$I_{FSM}$	$T_A=25^{\circ}C; 50Hz$ Half-Sine Wave; 8.3mS	30	A
Junction Temperature	$T_J$		150	$^{\circ}C$
Allowable Operation Case Temperature	$T_C$		-40~+150	$^{\circ}C$
Storage Temperature	$T_{STG}$		-40~+150	$^{\circ}C$

**ELECTRICAL CHARACTERISTICS:**  $T_A=25^{\circ}C$  (Unless Otherwise Specified)

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	$V_{FM}$	at $25^{\circ}C$ ; at $I_{FAVM}$	64	V
Maximum Reverse Current	$I_{R1}$	at $25^{\circ}C$ ; at $V_{RRM}$	5.0	$\mu A$
	$I_{R2}$	at $100^{\circ}C$ ; at $V_{RRM}$	50	$\mu A$
Maximum Reverse Recovery Time	$T_{RR}$	at $25^{\circ}C$ ; $I_f=0.5I_R; I_R=I_{FAVM}; I_{RR}=0.25I_R$	--	nS
Junction Capacitance	$C_J$	at $25^{\circ}C$ ; $V_R=0V; f=1MHz$	--	pF

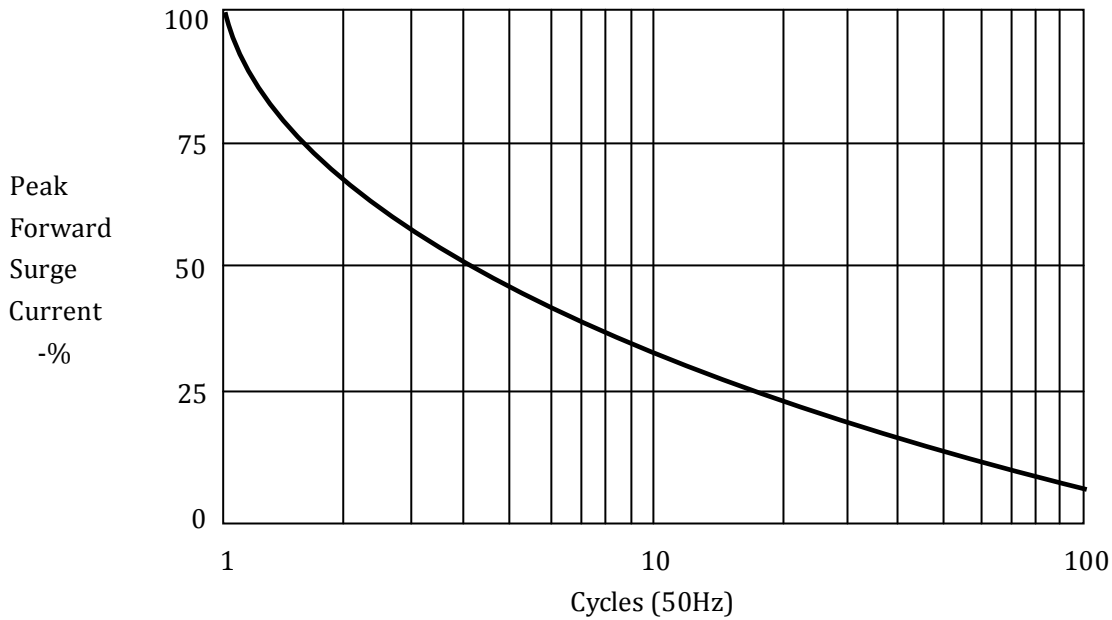
**Fig 1**

**Forward Current Derating Curve**



**Fig 2**

**Non-Repetitive Surge Current**



	Type	Code	Cathode Mark
<b>Marking</b>	HV1036	HV1036 HVGT	