

### 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. High current . low forward voltage
4. Conform to RoHS and SGS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.

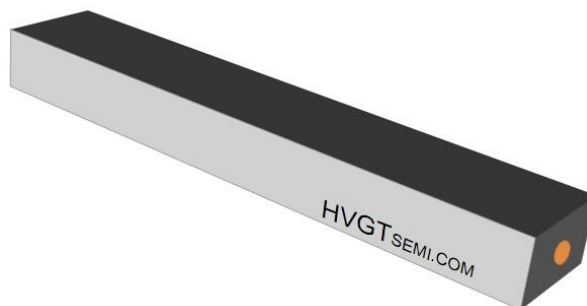
### APPLICATIONS:

1. Accelerator power supply.
2. High voltage test equipment circuit .
3. General purpose high voltage rectifier.
4. Environmental desulfurization system.

### MECHANICAL DATA:

1. Case: epoxy resin molding.
2. Terminal: screw holes.
3. Net weight: 200 grams (approx).

### SHAPE DISPLAY:

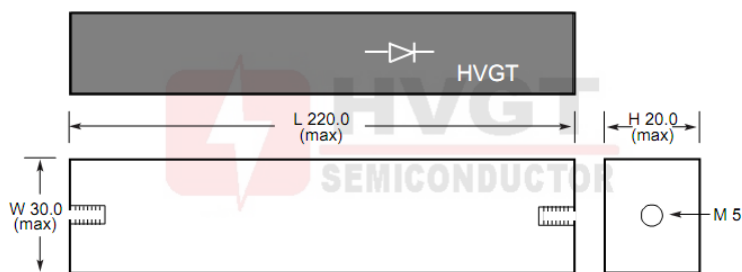


SIZE: (Unit:mm)

HVGT NAME: HVC-223020

### HVC-223020 Series

Screw Holes M5



Unit:mm

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

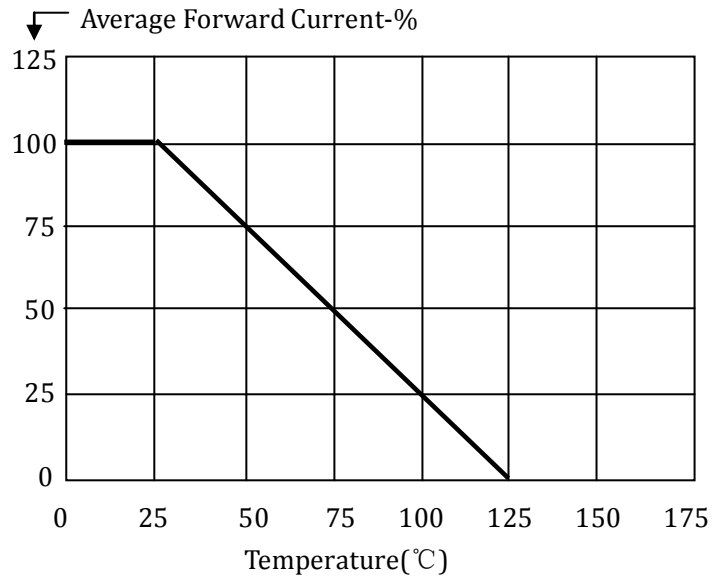
Items	Symbols	Condition	Data Value	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$	$T_A=25^{\circ}C$	40	kV
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	$T_A=25^{\circ}C$	48	kV
Average Forward Current Maximum	$I_{FAVM}$	$T_A=25^{\circ}C$	2.0	A
		$T_{OIL}=55^{\circ}C$	--	A
Non-Repetitive Forward Surge Current	$I_{FSM}$	$T_A=25^{\circ}C$ ; 60Hz Half-Sine Wave; 8.3ms	40	A
Junction Temperature	$T_J$		125	$^{\circ}C$
Allowable Operation Case Temperature	$T_C$		-40~+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	$V_{FM}$	at $25^{\circ}C$ ; at $I_{FAVM}$	48	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

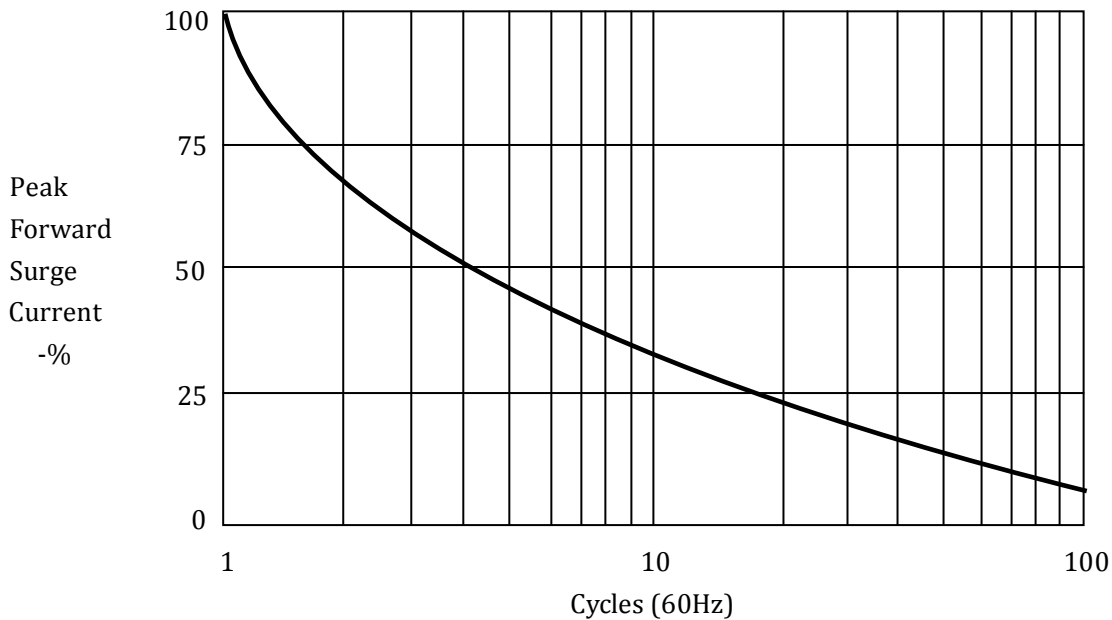
**Fig 1**

**Forward Current Derating Curve**



**Fig 2**

**Non-Repetitive Surge Current**



Marking	Type	Code	Cathode Mark
	2CL40KV/2A	2CL40KV/2A HVGT	