

### INTRODUCE:

HVGT high voltage axial lead rectifier assembly is made of high quality silicon GPP chip and high reliability epoxy resin sealing structure, and through professional testing equipment inspection qualified after to customers

### FEATURES:

1. High reliability design.
2. GPP chip.
3. High current . low forward voltage
4. Conform to RoHS and SGS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.

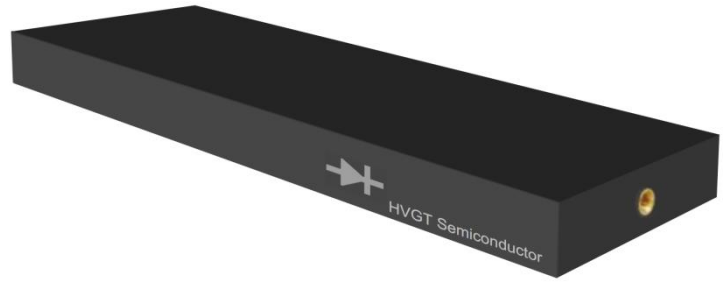
### APPLICATIONS:

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: 520 grams (approx).

### SHAPE DISPLAY:

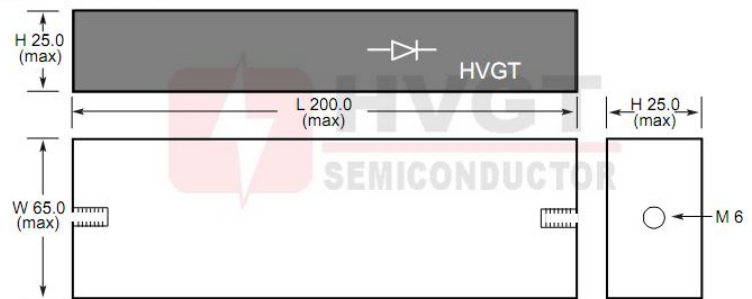


SIZE: (Unit:mm)

HVGT NAME: HVC-206525

### HVC-206525 Series

Screw Holes M6



Unit:mm

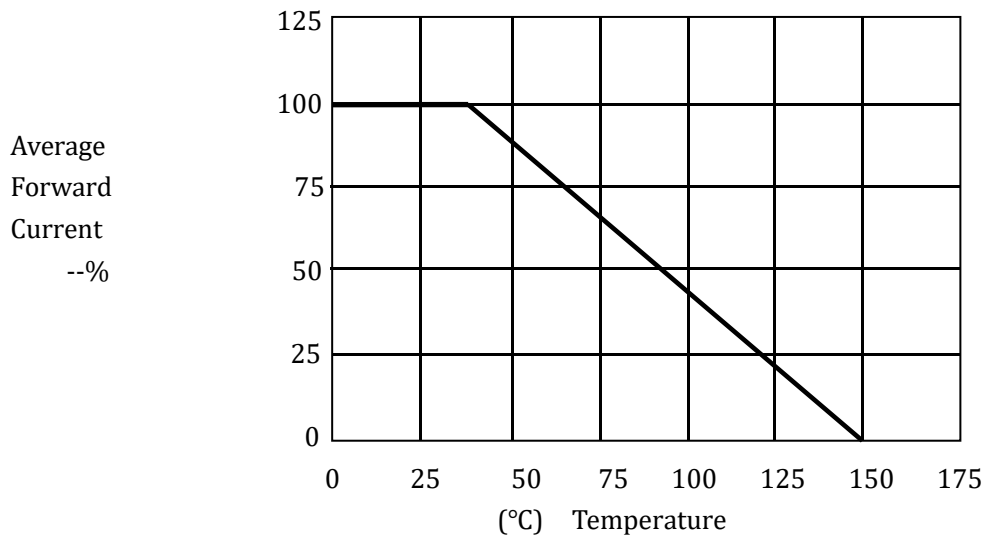
### MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)

| Items                                | Symbols   | Condition   | Data Value | Units       |
|--------------------------------------|-----------|---|------------|-------------|
| Repetitive Peak Reverse Voltage      | $V_{RRM}$ | $T_A=25^{\circ}C$   | 200        | kV          |
| Non-Repetitive Peak Reverse Voltage  | $V_{RSM}$ | $T_A=25^{\circ}C$   | 240        | kV          |
| Average Forward Current Maximum      | $I_{FVM}$ | $T_A=40^{\circ}C$ ; 50Hz Half-Sine Wave;<br>Resistance load | 0.5        | 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                  | $T_{STG}$ |   | -55~+175   | $^{\circ}C$ |

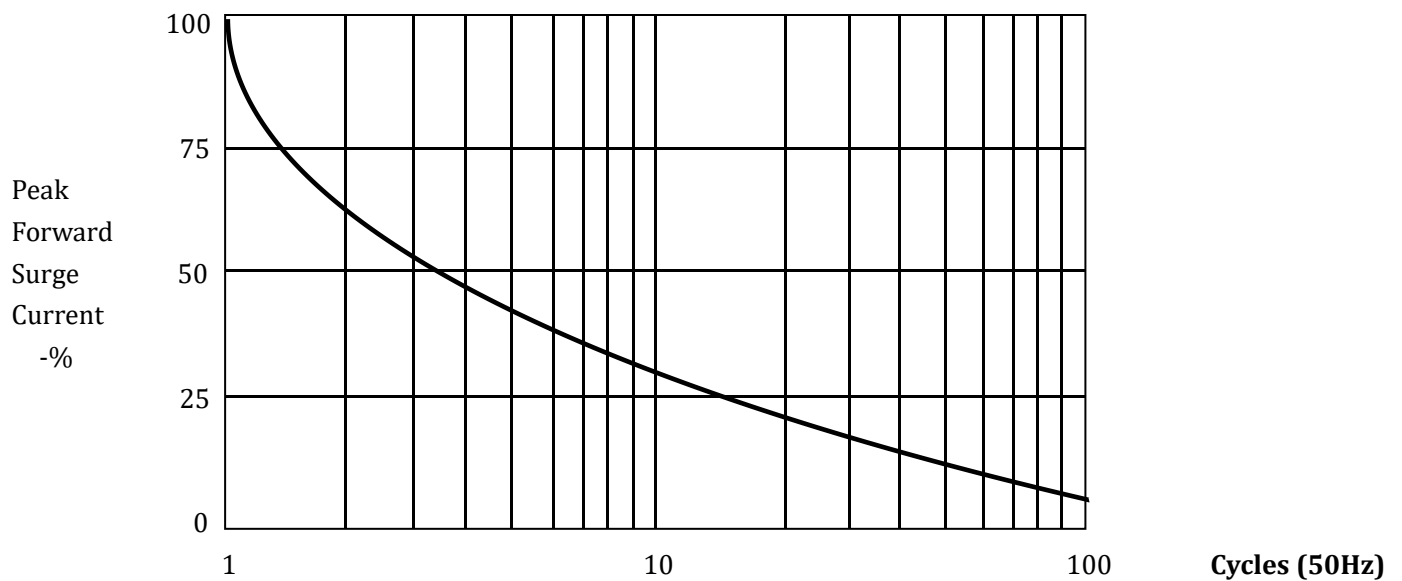
### ELECTRICAL CHARACTERISTICS: $T_A=25^{\circ}C$ (Unless Otherwise Specified)

| Items                         | Symbols  | Condition  | Data value | Units   |
|-------------------------------|----------|--|------------|---------|
| Maximum Forward Voltage Drop  | $V_{FM}$ | at $25^{\circ}C$ ; at $I_{FVM}$                                    | 220        | 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 $25^{\circ}C$ ; $I_F=0.5I_R$ ; $I_R=I_{FVM}$ ; $I_{RR}=0.25I_R$ | --         | nS      |
| Junction Capacitance          | $C_J$    | at $25^{\circ}C$ ; $V_R=0V$ ; $f=1MHz$                             | --         | pF      |

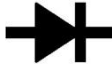
#### Forward Current Derating Curve



#### Non-Repetitive Surge Current



#### MARKING:

| Type       | Code               | Cathode Mark  |
|------------|--------------------|---|
| YG005S201D | YG005S201D<br>HVGT |  |

#### PART NUMBER NOTE:

| Type              | Chip     | I <sub>F(AV)</sub> | Connecting end          | V <sub>RRM</sub> | T <sub>RR</sub>                                   |
|-------------------|----------|--------------------|-------------------------|------------------|---|
| <b>Y</b>          | <b>G</b> | <b>005</b>         | <b>S</b>                | <b>201</b>       | <b>D</b>  |
| Assembly Y Series | GPP Chip | 0.5A               | L=Lead<br>S=Screw Holes | 200kV            | (U)75ns<br>(G)100ns<br>(D) Standard Recovery Time |