# HC05

## 1.0A 5.0kV-- Glass Passivated Rectifier Assembly

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. Power frequency ratio.
4. Conform to RoHS and SGS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.

**APPLICATIONS:**

1. Ignition device power supply.
2. Microwave emission power.
3. General purpose high voltage rectifier.

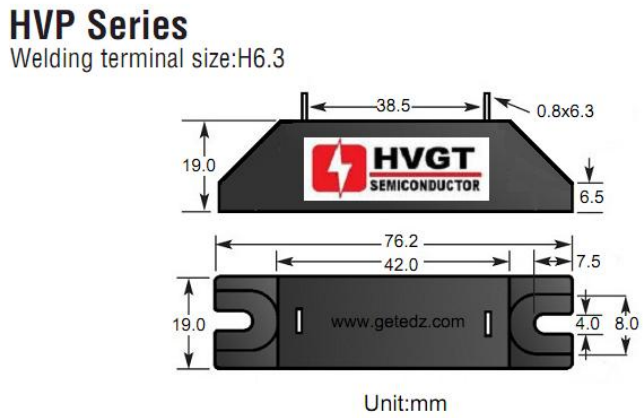
**MECHANICAL DATA:**

1. Case: epoxy resin molding.
2. Terminal: external lead.
3. Net weight: 35 grams (approx).

**SHAPE DISPLAY:**



**SIZE: (Unit:mm)** **HVGT NAME: HVP**



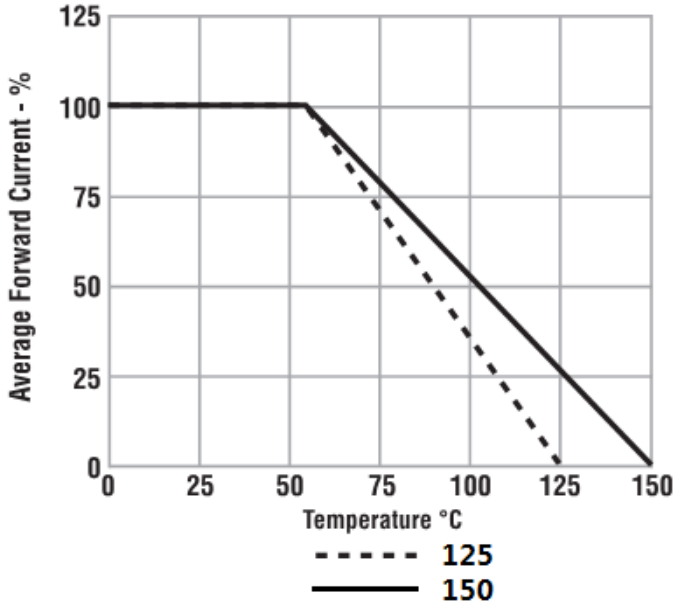
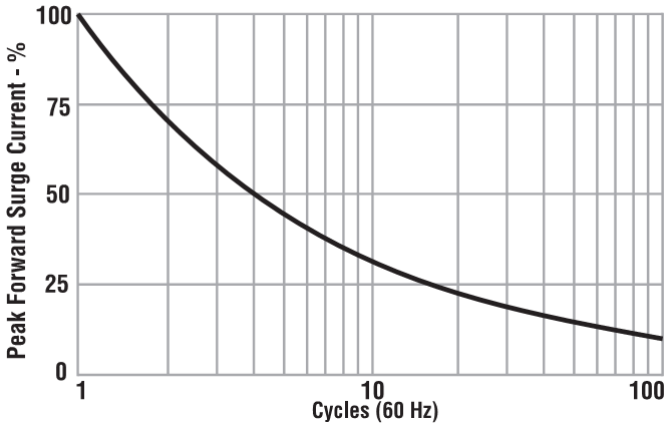

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**MAXIMUM RATINGS AND CHARACTERISTICS:** **(**Absolute Maximum Ratings)

| Items | Symbols | Condition | Data Value | Units |
|---|---|---|---|---|
| Repetitive Peak Renerse Voltage | $V_{RRM}$ | Ta=25°C; | 5.0 | kV |
| Average Output Current | $I_F$ | Ta=55°C;Resistive Load | 1000 | mA |
| Suege Current | $I_{FSM}$ | Ta=25°C;8.3 mS | 50 | 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;$I_F$ =$I_{F(AV)}$ | 4.5 | V |
| Maximum Reverse Current | $I_R$1 | at 25°C;$V_R$ =$V_{RRM}$ | 0.5 | uA |
| | $I_R$2 | at 100°C;$V_R$ =$V_{RRM}$ | 50 | uA |
| Maximum Reverse Recovery Time | $T_{RR}$ | at 25°C; $I_F$=0.5$I_R$; $I_R$=$I_{FAVM}$; $I_{RR}$=0.25$I_R$ | -- | nS |
| Junction Capacitance | $C_J$ | at 25°C; $V_R$=0V; f=1MHz | -- | pF |

| Fig 1 | Fig 2 |
|---|---|
| **Forward Current Derating Curve** | **Repetitive Surge Current Derating Curve** |
|  |  |
| Show average current rating at 55°C,unless otherwise specified.<br>Max operating temperature is 150°C,unless otherwise specified. | This curve represents the percentage of published maximum surge rating as a function of surge repetition. |

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