# HVG3A300 3.0A 30kV 80nS

## Glass passivation Ultra Fast Recovery Rectifier Assembly

**INTRODUCE:**

HVGT high voltage silicon rectifier assembly 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. Ultra high frequency design.
4. Conform to RoHS and SGS
5. Glass passivation.
6. 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. High voltage test equipment.
5. Other.

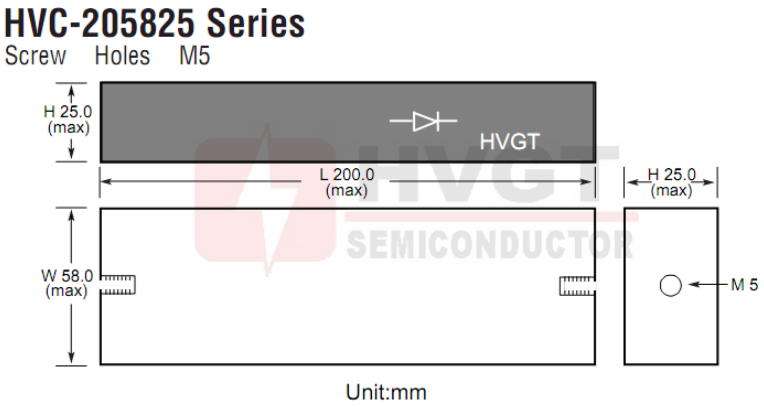
**MECHANICAL DATA:**

1. Case: epoxy resin molding.
2. Terminal: welding axis.
3. Net weight: 490 grams (approx).

**SHAPE DISPLAY:**



**SIZE: (Unit:mm)** **HVGT NAME: HVC-205825**



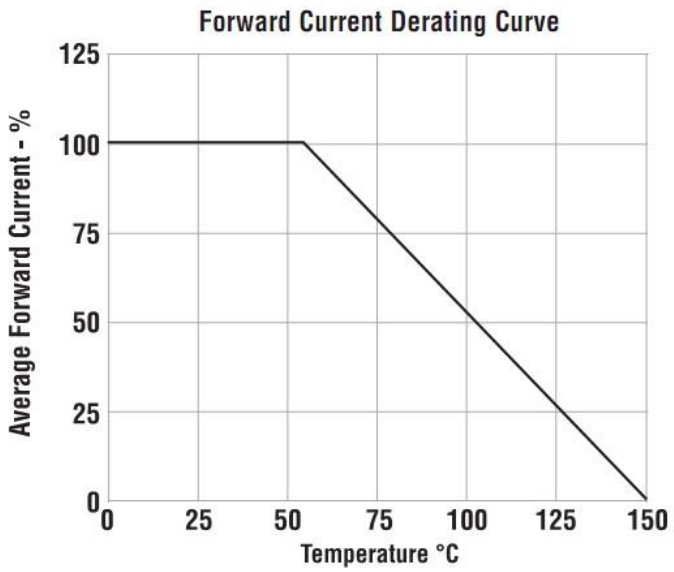

**MAXIMUM RATINGS AND CHARACTERISTICS:** (Absolute Maximum Ratings)

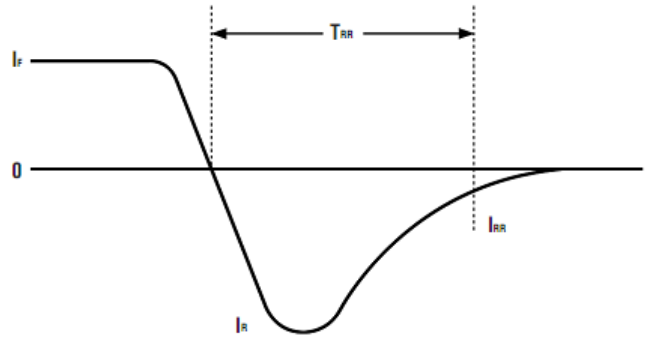
| Items | Symbols | Condition | Data Value | Units |
|---|---|---|---|---|
| Repetitive Peak Renerse Voltage | $V_{RRM}$ | $T_A$=25°C | 30 | kV |
| Average Forward Current Maximum | $I_{FAVM}$ | $T_A$=55°C | 3.0 | A |
| Suege Current | $I_{FSM}$ | $T_A$=25°C; Half-Sine Wave; 8.3mS | 90 | A |
| Junction Temperature | $T_J$ | | 125 | °C |
| Allowable Operation Case Temperature | Tc | | -55~+150 | °C |
| Storage Temperature | $T_{STG}$ | | -55~+150 | °C |

**ELECTRICAL CHARACTERISTICS:** $T_A$=25°C (Unless Otherwise Specified)

| Items | Symbols | Condition | Data value | Units |
|---|---|---|---|---|
| Maximum Forward Voltage Drop | $V_F$ | at 25°C; at $I_{F(AV)}$ | 36 | V |
| Maximum Reverse Current | $I_R$1 | at 25°C; at $V_{RRM}$ | 2.0 | uA |
| | $I_R$2 | at 100°C; at $V_{RRM}$ | 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$I_R$ | 80 | 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 |




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

| Fig 3 |
|---|
| Non-Repetitive Surge Current |

