

### INTRODUCE:

HVGT brand high voltage silicon rectifier diodes is made of high quality wafer chip and high reliability epoxy resin sealing structure, and through professional testing equipment inspection qualified after to customers.

### FEATURES:

1. Fast recovery time.
2. High quality chip composition.
3. Medium Current, Low Forward Voltage.
4. onform to RoHS and SGS.
5. Epoxy Resin Molded in Vacuum.
6. Have Anticorrosion in The Surface.
7. ANSI/UL94 V-0 Rated Material.

### APPLICATIONS:

1. Voltage multiplying circuit.
2. General purpose high voltage rectifier.
3. X-ray power supply.

### REFERENCE SHAPE:



HVGT SEMI Package Naming: DO-415

### MECHANICAL DATA:

1. Case: Epoxy resin molding.
2. Terminal: Axis soft lead.
3. Net weight: 0.65 grams (approx).

### MAXIMUM RATINGS AND CHARACTERISTICS: (25°C ambient temperature unless stated otherwise.)

| Items                                | Symbols    | Condition                                      | Data Value | Units       |
|--------------------------------------|------------|------------------------------------------------|------------|-------------|
| Repetitive Peak Reverse Voltage      | $V_{RRM}$  | $T_a=25^{\circ}C$                              | 25         | kV          |
| Non-Repetitive Peak Reverse Voltage  | $V_{RSM}$  | $T_a=25^{\circ}C$                              | --         | kV          |
| Average Forward Current Maximum      | $I_{FAVM}$ | $T_a=40^{\circ}C$                              | 90         | mA          |
|                                      |            | $T_{oil}=55^{\circ}C$                          | 150        | mA          |
| Non-Repetitive Forward Surge Current | $I_{FSM}$  | $T_a=25^{\circ}C$ ; 60Hz Half-Sine Wave; 8.3mS | 10         | A           |
| Junction Temperature                 | $T_J$      |                                                | 125        | $^{\circ}C$ |
| Allowable Operation Case Temperature | $T_C$      |                                                | -40~+125   | $^{\circ}C$ |
| Storage Temperature                  | $T_{STG}$  |                                                | -40~+150   | $^{\circ}C$ |

### ELECTRICAL CHARACTERISTICS: (25°C ambient temperature unless stated otherwise.)

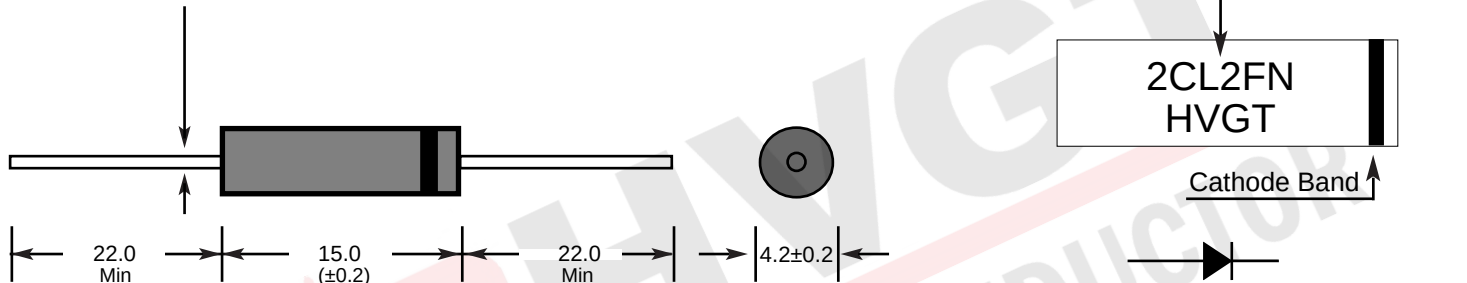
| Items                         | Symbols  | Condition                                                 | Data Value | Units   |
|-------------------------------|----------|-----------------------------------------------------------|------------|---------|
| Maximum Forward Voltage Drop  | $V_{FM}$ | at 25°C; at 100mA                                         | 41         | V       |
| Maximum Reverse Current       | $I_{R1}$ | at 25°C; at $V_{RRM}$                                     | 2.0        | $\mu A$ |
|                               | $I_{R2}$ | at 100°C; at $V_{RRM}$                                    | 50         | $\mu A$ |
| Maximum Reverse Recovery Time | $T_{RR}$ | at 25°C; $I_F=0.5I_R$ ; $I_R=I_{FAVM}$ ; $I_{RR}=0.25I_R$ | 100        | nS      |
| Junction Capacitance          | $C_J$    | at 25°C; $V_R=0V$ ; $f=1MHz$                              | 1.5        | pF      |

### DRAWINGS: (Unit:mm)

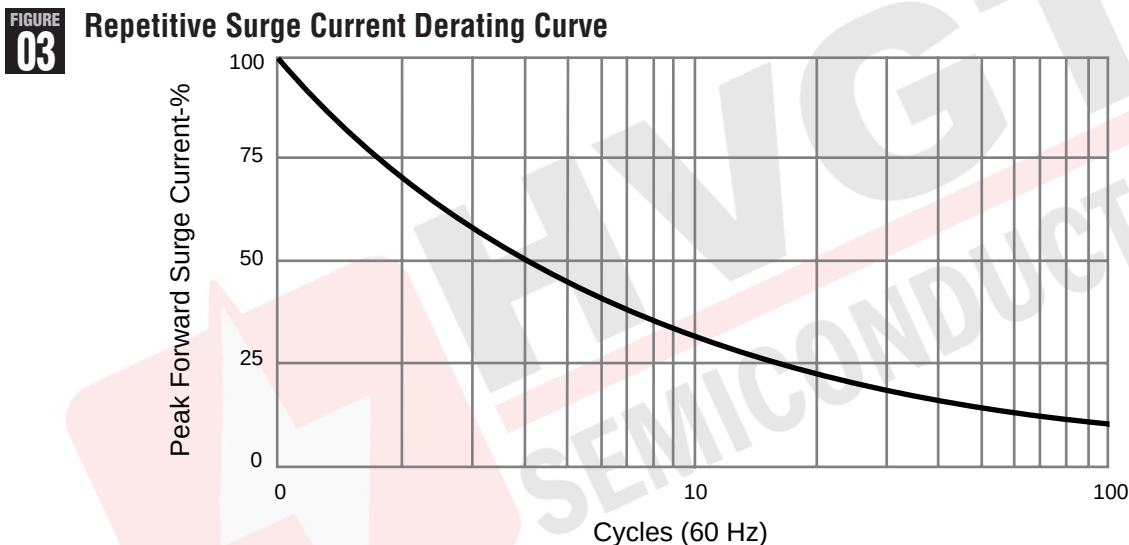
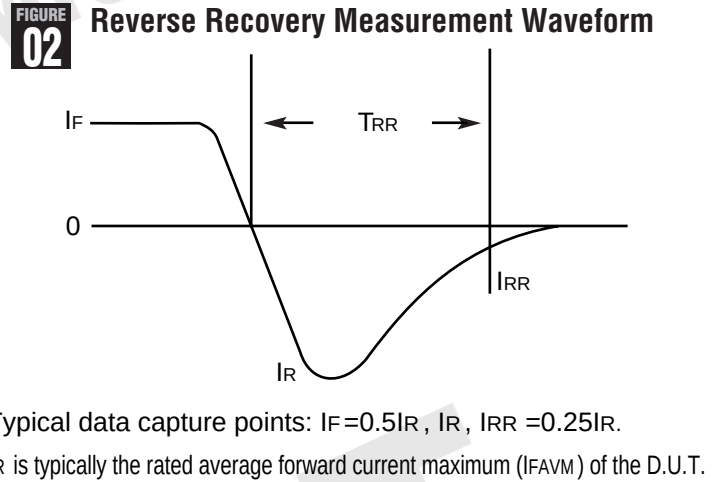
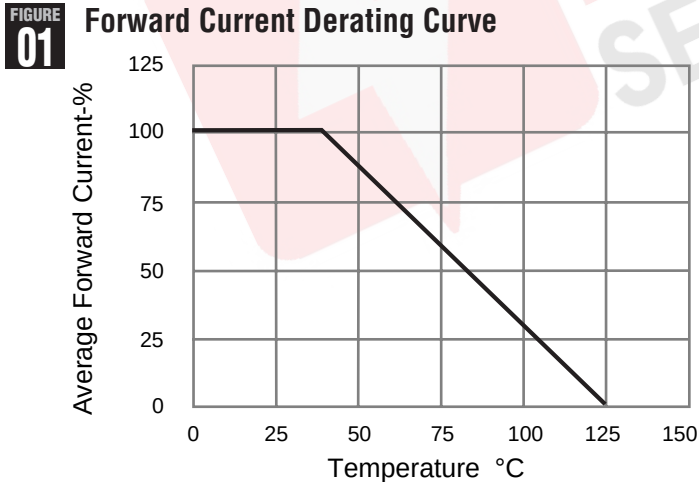
### MARKING:

#### DO-415 Series

Lead Diameter 0.8mm  $\pm 0.03$



### ELECTRICAL PROPERTY CURVE CHART:



This curve represents the percentage of published maximum surge rating as a function of surge repetition.

**NOTE:** Specifications subject to change without notice. Photo is representation only.  
 Standard package quantity: 1,000PCS/in Box.