

INTRODUCE:

HVGT brand high voltage silicon rectifier diodes 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. Design of glass passivation chip(GPP).
2. Fast recovery time.
3. Axial Lead.
4. Large current design.
5. Epoxy resin molded in vacuum.
6. Have anticorrosion in the surface.
7. ANSI/UL94 V-0 Rated Material.

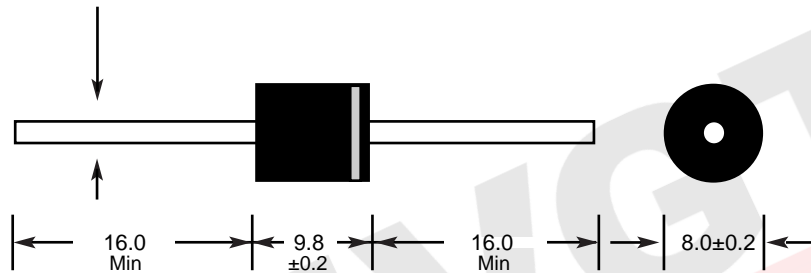
APPLICATIONS:

1. Detecting equipment.
2. General purpose high voltage rectifier.
3. X-ray voltage doubling circuit.
4. Microwave transmission power supply.

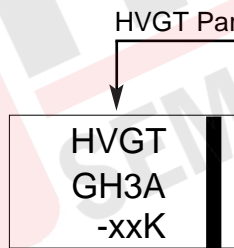
DRAWINGS: (Unit:mm)

DO-810 Series

Lead Diameter 2.0 ±0.05



MARKING:



Cathode Band ↑



REFERENCE SHAPE:



HVGT SEMI Package Naming: DO-810

MECHANICAL DATA:

1. Case: epoxy resin molding.
2. Terminal: Axis soft lead.
3. Net weight: 2.40 grams (approx).

Maximum Ratings And Characteristics: (25°C ambient temperature unless stated otherwise.)

HVGT Part	V _{RRM}	I _{FAVM1}	I _{FAVM2}	V _F	I _{R1}	I _{R2}	I _{FSM}	T _{RR}	C _J
Number	kV	A	A	V	uA	uA	A	nS	pF
GH3A-03K	3.0	4.0	6.0	5.5	2.0	20	200	75	65
GH3A-05K	5.0	3.0	4.5	8.0	2.0	20	150	75	45
GH3A-08K	8.0	2.0	3.0	10.5	2.0	20	120	75	30
GH3A-10K	10.0	1.5	2.2	12.0	2.0	20	100	75	24

Temperature:

Storage Temperature: -55 to 175 °C

Operating Temperature: -55 to 175 °C (GH3A-03K)

-55 to 150 °C (All other part number)

Maximum Junction Temperature: 175 °C (GH3A-03K)

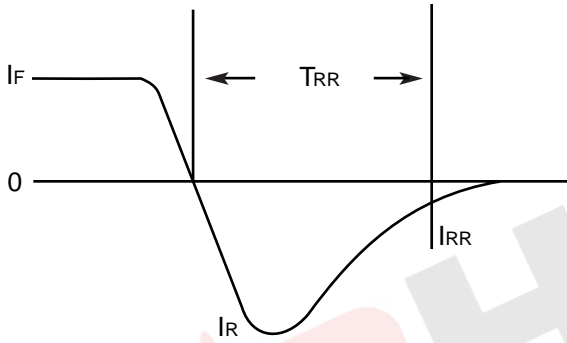
150 °C (All other part number)

Specification Definitions:

Symbols	Items	Condition
V _{RRM}	Maximum Repetitive Reverse Voltage	--
I _{FAVM1}	Maximum Average Forward Current	At *T _L = 55°C
I _{FAVM2}	Maximum Average Forward Current	At T _{oil} = 55°C
V _F	Maximum Forward Voltage Drop	At I _{FAVM} (T _L)
I _{R1}	Maximum Leakage Current	At V _{RRM} T _A = 25°C
I _{R2}	Maximum Leakage Current	At V _{RRM} T _{oil} = 100°C
I _{FSM}	Maximum Surge Current	At 8.3 mS, Single Half Sine
T _{RR}	Maximum Reverse Recovery Time	I _F = 0.5 A ; I _R = -1.0A ; I _{RR} = -0.25 A
C _J	Typical Junction Capacitance	At V _R = 0VDC, f = 1MHz

*Temperature measured at lead egress; lead length = 9.5mm

FIGURE 01 Reverse Recovery Measurement Waveform



Typical data capture points: $I_F = 0.5I_R$, $I_R = -1.0A$, $I_{RR} = -0.25A$
 I_R is typically the rated average forward current maximum (I_{FAVM}) of the D.U.T.

FIGURE 02 Forward Current Derating Curve

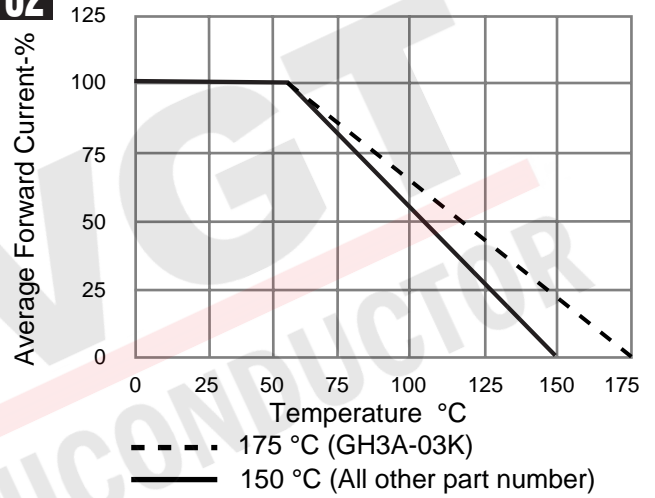


FIGURE 03 Positive Characteristic Curve

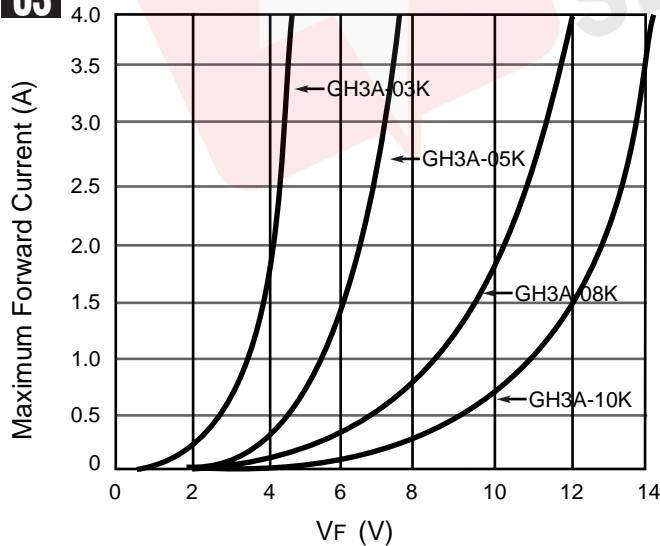


FIGURE 04 Reverse Leakage Current Curve With Voltage Variation

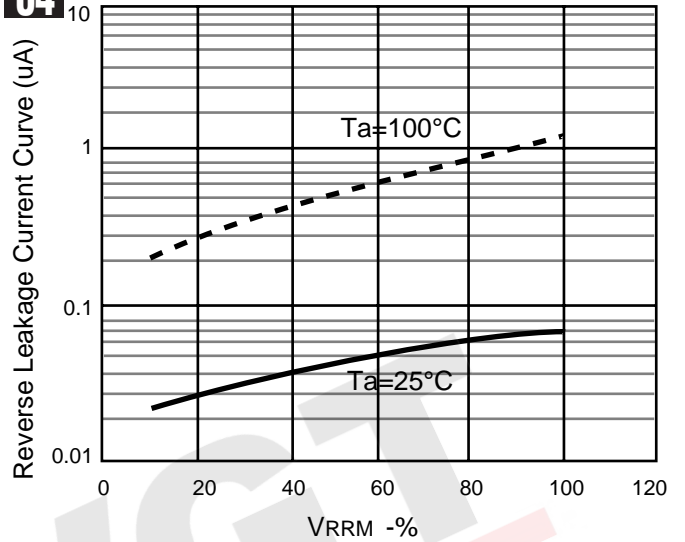
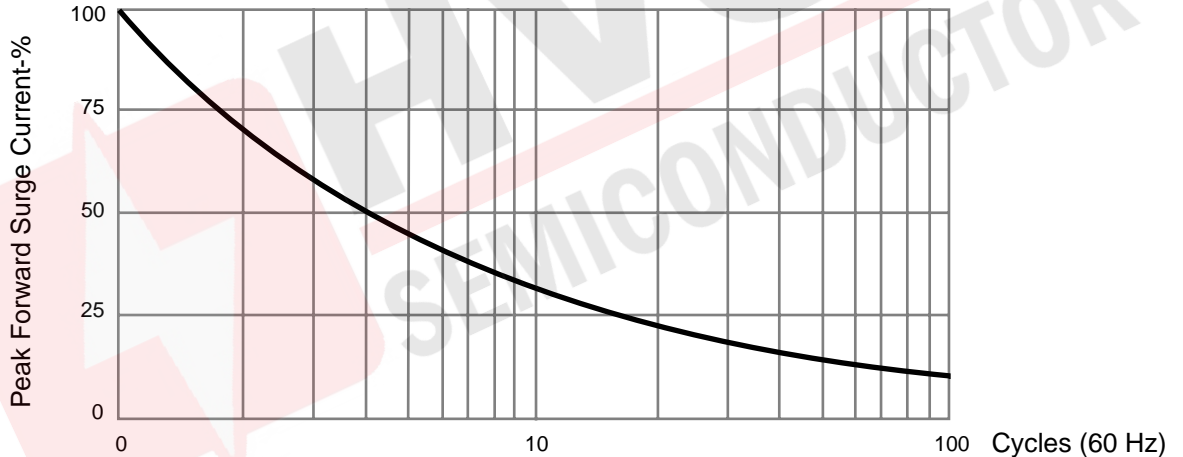


FIGURE 05 Repetitive Surge Current Derating Curve



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:500PCS/in Box.