

INTRODUCE:

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

FEATURES:

- ▶ High quality silicon chip construction.
- ▶ Fast recovery time.
- ▶ Axial lead.
- ▶ Medium current design.
- ▶ High voltage and low current design
- ▶ Epoxy resin molded in vacuum.
- ▶ Have anticorrosion in the surface.
- ▶ ANSI/UL94 V-0 rated material.

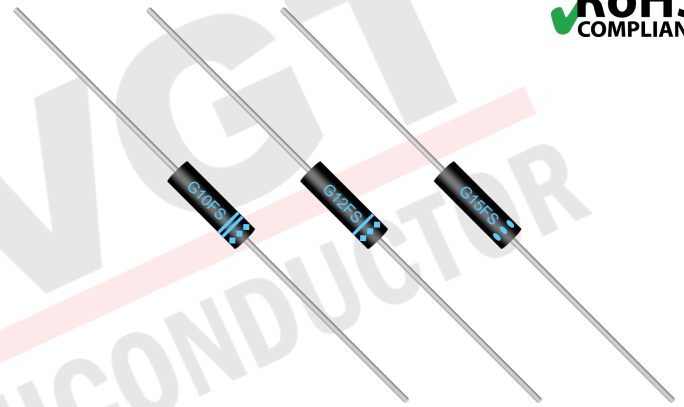
APPLICATIONS:

- ▶ Air purification, negative ions.
- ▶ Electrostatic voltage doubling circuit.
- ▶ X-ray voltage doubling circuit.
- ▶ Other high voltage rectifier circuits.

MECHANICAL DATA:

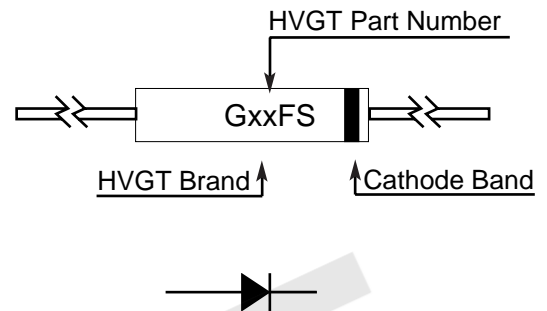
- ▶ Case: Epoxy resin molding.
- ▶ Terminal: Axis soft lead.
- ▶ Net weight: 0.30 grams (approx).

REFERENCE SHAPE:



HVGT SEMI Package Naming: DO-310

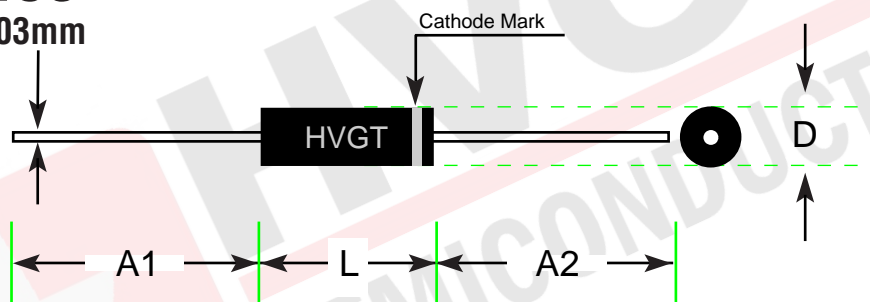
MARKING:



PACKAGE SIZE:

DO-310 Series

Lead Diameter $0.6 \pm 0.03\text{mm}$



Dim.	Millimeters			Inches		
	Value	Min.	Max.	Value	Min.	Max.
D	3.0	2.8	3.2	0.118	0.110	0.126
L	10.0	9.8	10.2	0.394	0.386	0.402
A1,A2	25.4	25.4	--	1.0	1.0	--

MAXIMUM RATINGS AND CHARACTERISTICS: (Ta=25° C, Ambient temperature unless stated otherwise.)

HVGT Part Number	VRRM	VRSM	IFAVM	VFM	IR1	IR2	IFSM	T _{RR}	C _J	HVGT Package Dimensions
HV25G10	10	12	25	23	0.2	20	3.0	100	0.65	DO-310
HV25G12	12	14	25	25	0.2	20	3.0	100	0.26	DO-310
HV25G15	15	18	25	28	0.2	20	3.0	100	0.26	DO-310

TEMPERATURE:

Maximum Junction Temperature: 125 ° C

Operating Temperature: -55 to 125 ° C

Storage Temperature: -55 to 175 ° C

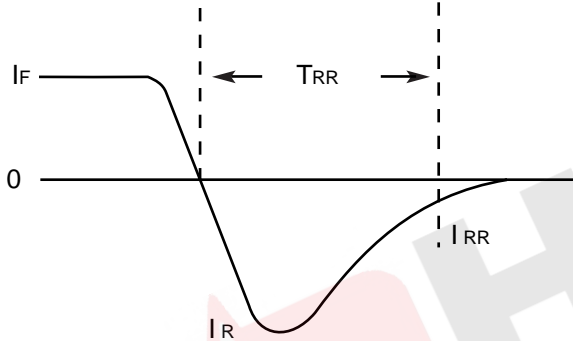
SPECIFICATION DEFINITIONS:

Items	Symbols	Condition
Maximum Repetitive Reverse Voltage	VRRM	--
Maximum Average Forward Current	IFAVM1	60Hz half-sine wave; Resistance load; Ta= 55° C
Maximum Average Forward Current	IFAVM2	60Hz half-sine wave; Resistance load; Toil= 55° C
Maximum Leakage Current	IR1	A t VRRM ; Ta=25° C
Maximum Leakage Current	IR2	A t VRRM ; Ta=100° C
Maximum Forward Voltage Drop	VFM	A t 10mA
Maximum Surge Current	IFSM	A t 8.3mS, Single Half Sine
Reverse Surge Current	IRSM	WP=1mS; Ta= 25° C; One-shot
Maximum Reverse Recovery Time	T _{RRM}	A t IF= 0.5 IFAVM; IR = -IFAVM; IRR = -0.25 IFAVM
Maximum Junction Capacitance	CJM	A t VR = 0VDC, f = 1MHz

Note: Specifications subject to change without notice. Photo is representation only.
Standard package quantity:4,000PCS/in Box.

RATING & CHARACTERISTIC CURVES OF HIGH-VOLTAGE DIODES

FIGURE 01 Reverse Recovery Measurement Waveform



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

I_R is typically the rated average forward current maximum (I_{FAVM}) of the D.U.T

FIGURE 02 Forward Current Derating Curve

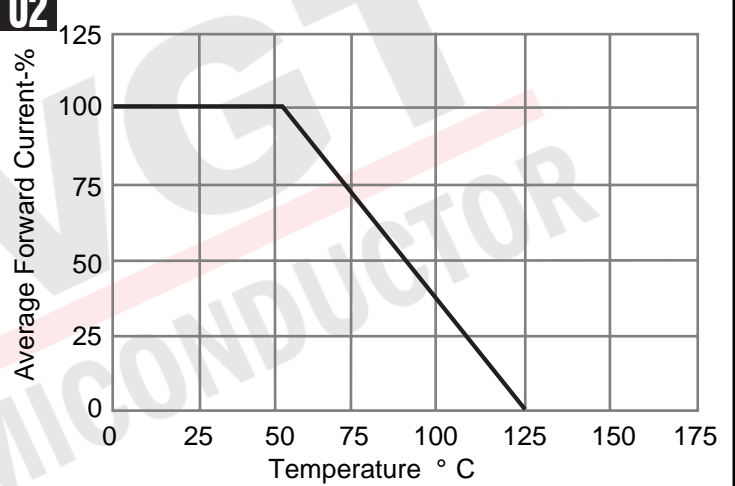


FIGURE 03 Positive Characteristic Curve

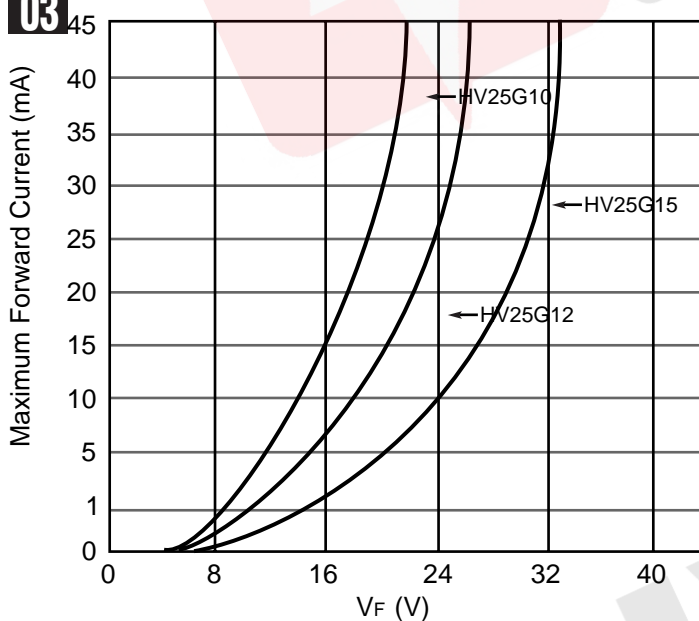


FIGURE 04 Reverse Leakage Current Curve With Voltage Variation

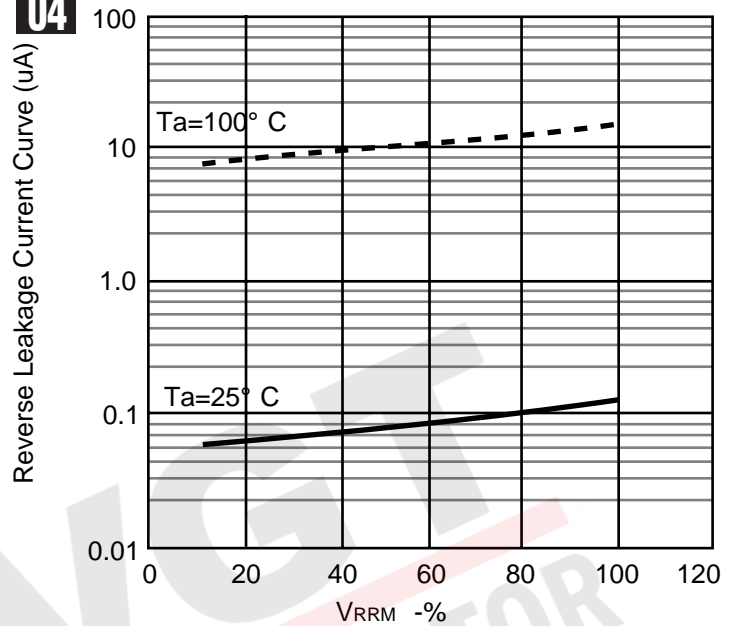
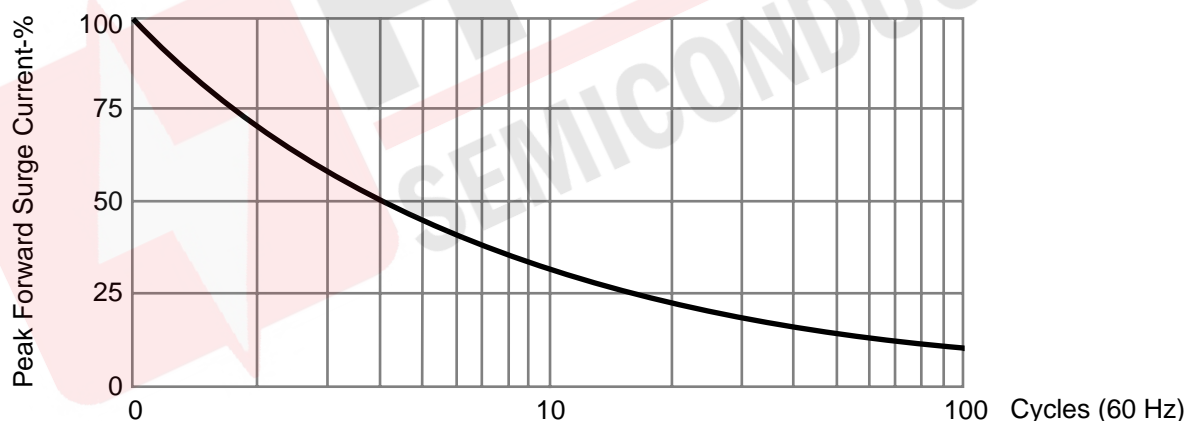


FIGURE 05 Repetitive Surge Current Derating Curve



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