

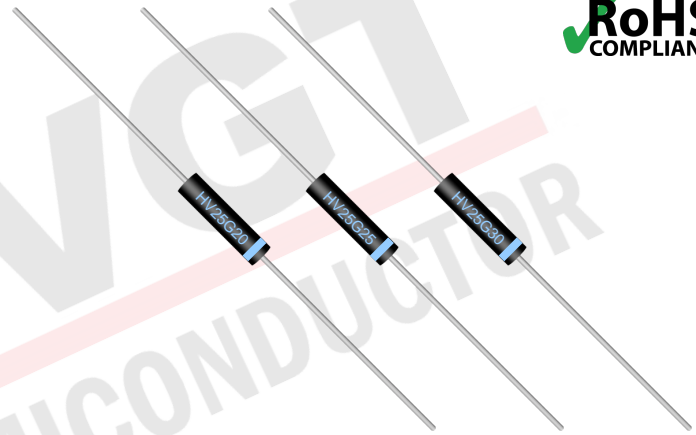
INTRODUCE:

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.

REFERENCE SHAPE:

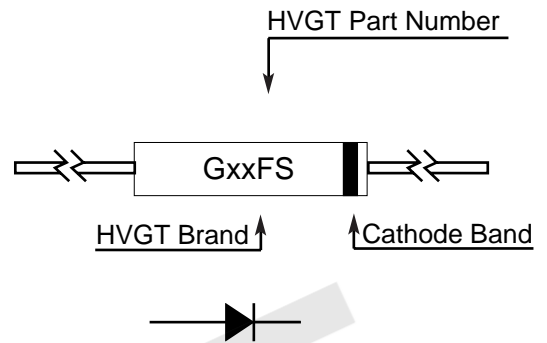


HVGT SEMI Package Naming: DO-312

APPLICATIONS:

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

MARKING:



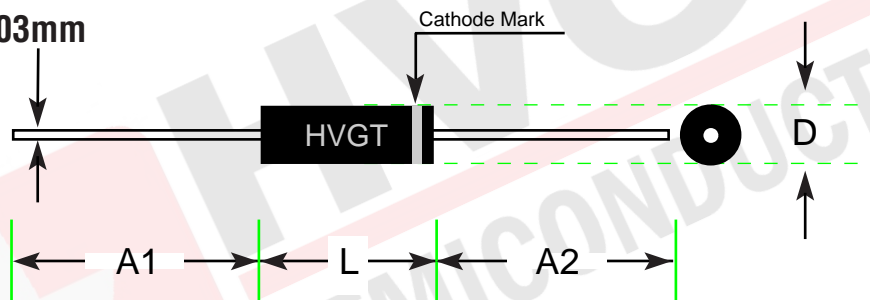
MECHANICAL DATA:

- ▶ Case: Epoxy resin molding.
- ▶ Terminal: Axis soft lead.
- ▶ Net weight: 0.34 grams (approx).

PACKAGE SIZE:

DO-312 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	12.0	11.8	12.2	0.472	0.464	0.480
A1,A2	25.4	25.4	--	1.0	1.0	--

VERSION: 2026

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
HV25G20	20	24	25	35	0.2	20	3.0	100	0.25	DO-312
HV25G25	25	30	25	42	0.2	20	3.0	100	0.20	DO-312
HV25G30	30	36	25	48	0.2	20	3.0	100	0.26	DO-312

TEMPERATURE:

Maximum Junction Temperature: 125 ° C

Operating Temperature: -55 to 125 ° C

Storage Temperature: -55 to 175 ° C

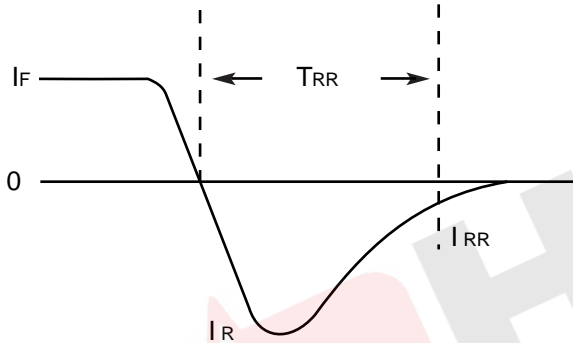
SPECIFICATION DEFINITIONS:

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	W P=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

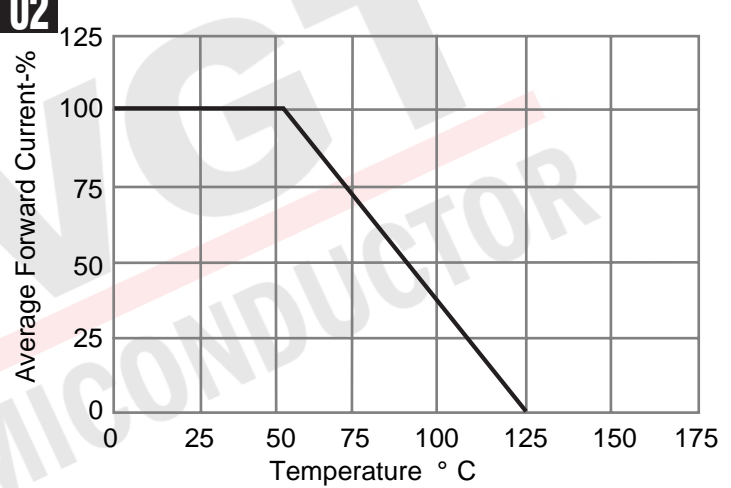


FIGURE 03 Positive Characteristic Curve

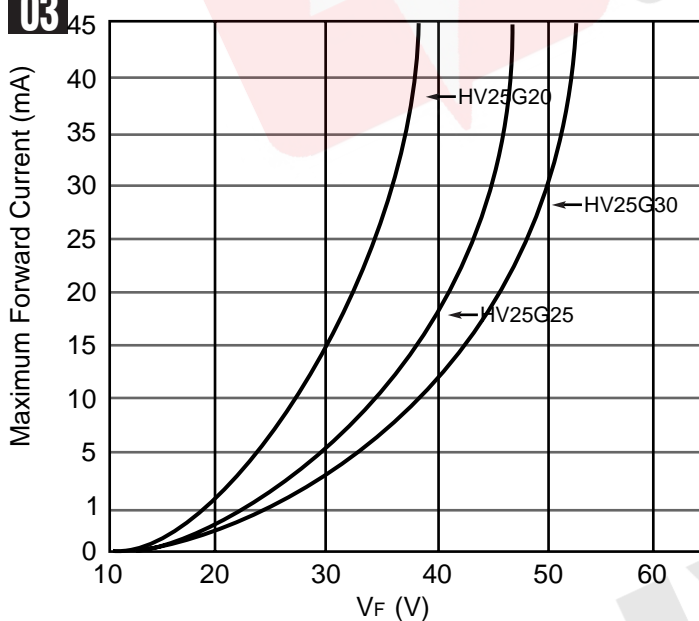


FIGURE 04 Reverse Leakage Current Curve With Voltage Variation

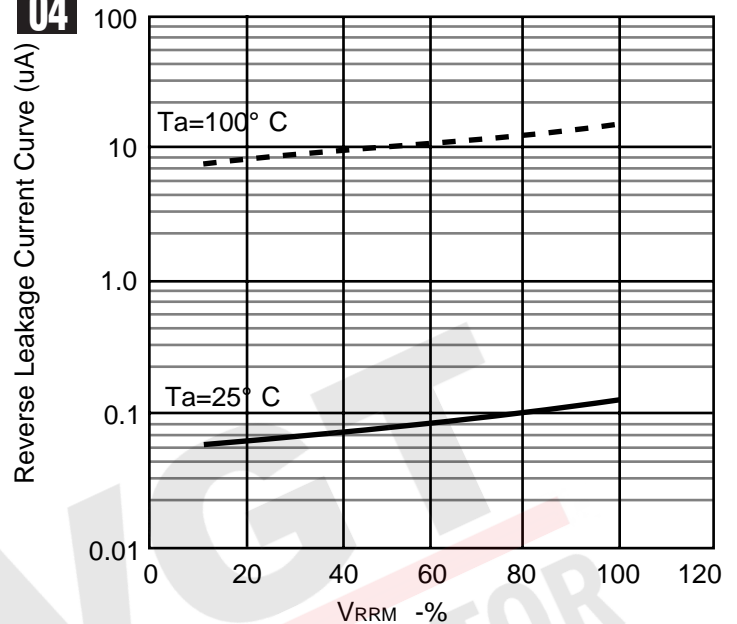
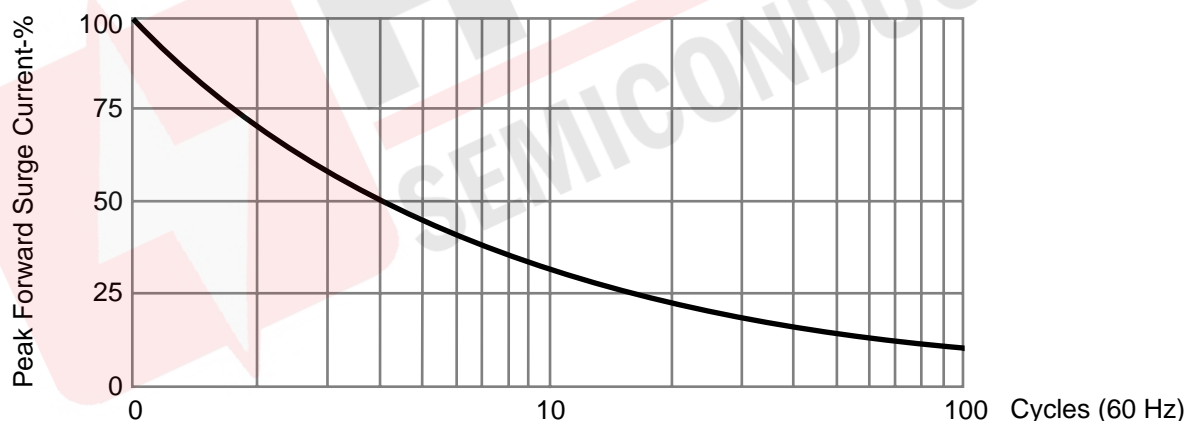


FIGURE 05 Repetitive Surge Current Derating Curve



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