

INTRODUCE:

HVGT 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:

- ▶ Built in glass passivation chip.
- ▶ Fast recovery time.
- ▶ High current.
- ▶ High voltage design.
- ▶ High reliability design.
- ▶ Have anticorrosion in the surface.
- ▶ UL94V-0 rated material epoxy resin vacuum forming.

APPLICATIONS:

- ▶ X-ray power supply.
- ▶ Laser generator power supply.
- ▶ Voltage doubling circuit.
- ▶ Microwave transmission power supply.
- ▶ Other high voltage rectifier circuits.

MECHANICAL DATA:

- ▶ Case: Epoxy resin molding.
- ▶ Terminal: Surface mount welding.
- ▶ Net weight: 13.5 grams (approx).

REFERENCE SHAPE:

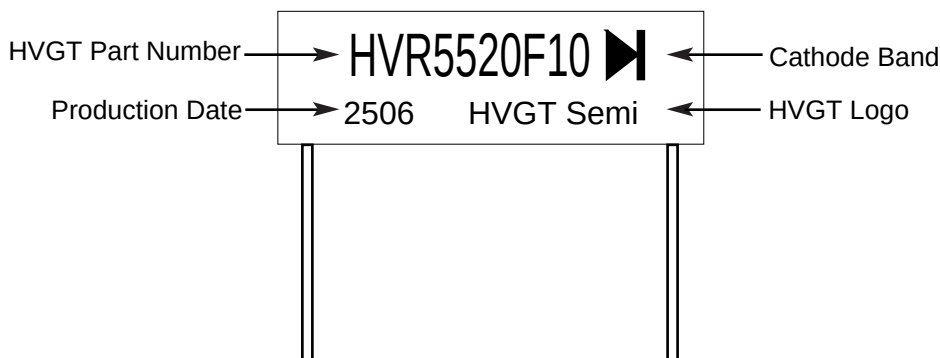


HVGT Name: HVR-101255H

PRIMARY CHARACTERISTICS:

IF (AV)	2.0	A
VRRM	10	kV
IFSM	50	A
IRM	1.0	uA
VFM	12	V
T_{RR}	100	nS
T_J (max.)	125	° C

MARKING:



Note: Specifications subject to change without notice. Photo is representation only.

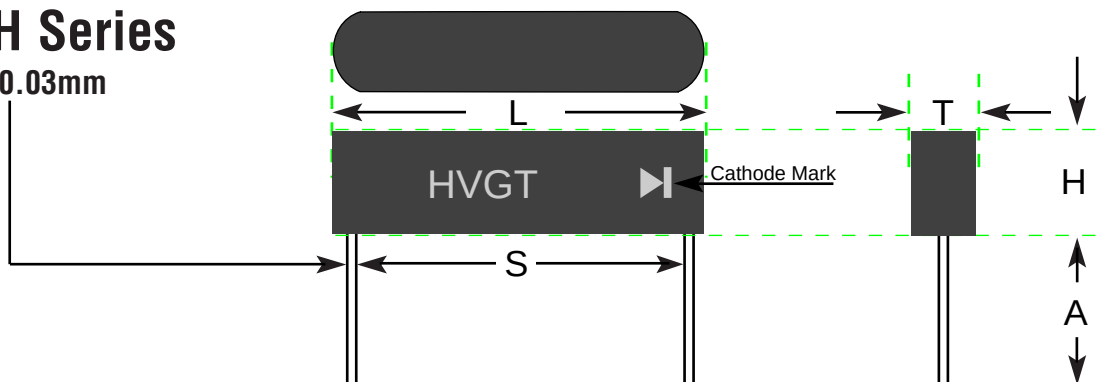
Standard package quantity:250PCS/in Box.

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PACKAGE SIZE:

HVR-101255H Series

Lead Diameter $1.20 \pm 0.03\text{mm}$



Dim.	Millimeters			Inches			Dim.	Millimeters			Inches		
	Value	Min.	Max.	Value	Min.	Max.		Value	Min.	Max.	Value	Min.	Max.
H	12.0	11.5	12.5	0.472	0.453	0.492	T	10.0	9.8	10.2	0.394	0.386	0.402
L	55.0	53.0	57.0	2.165	2.087	2.244	S	50.0	48.0	52.0	1.969	1.890	2.047
A	20.0	20.0	--	0.787	0.787	--							

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

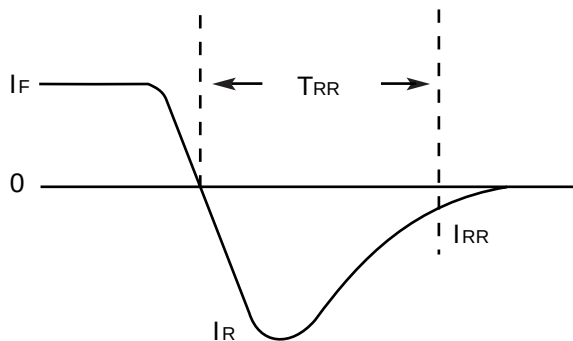
Items	Symbols	Condition	Data Value	Units
Maximum Repetitive Reverse Voltage	VRRM	--	10	kV
Non-Repetitive Peak Reverse Voltage	VRSM	--	12	kV
Maximum Average Forward Current	IFAVM	TA = 55° C	2.0	A
		TOIL= 55° C	3.0	A
Non-Repetitive Forward Surge Current	IFSM	60Hz Half-Sine Wave; 8.3ms	50	A
Maximum Junction Temperature	TJ		125	° C
Allowable Operation Case Temperature	TC		-40~125	° C
Storage Temperature	TSTG		-55~150	° C

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

Items	Symbols	Condition	Data Value	Units
Maximum Forward Voltage Drop	VFM	At IFAVM	12	V
Maximum Reverse Current	IR1	At VRRM, TA =25° C	1.0	uA
	IR2	At VRRM, TA =100° C	20	uA
Maximum Reverse Recovery Time	TRR	IF=0.5IR; IR=IFAVM; IRR=0.25IR	100	nS
Typical Junction Capacitance	CJ	At VR = 0VDC, f = 1MHz	--	pF

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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

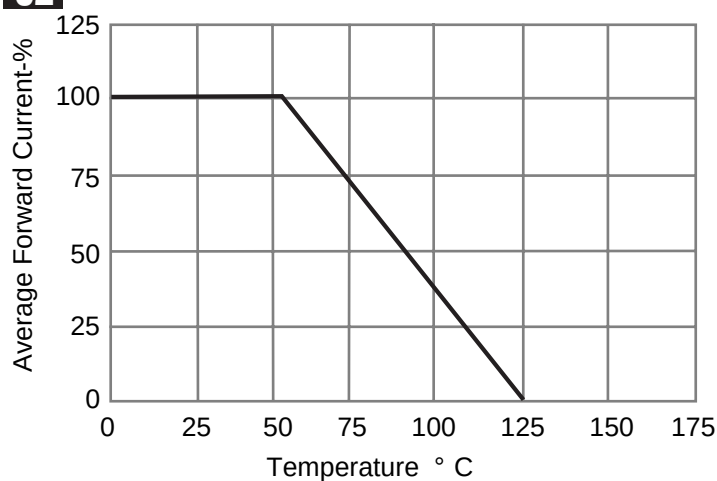


FIGURE 03 Forward Characteristics

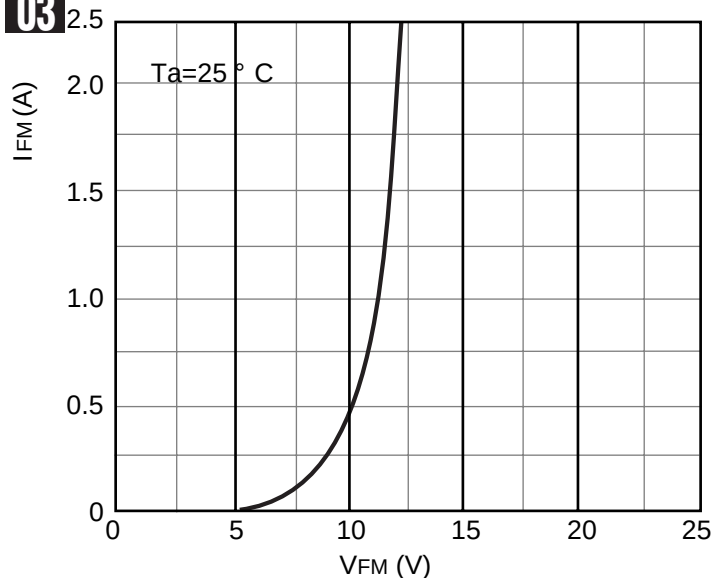


FIGURE 04 Reverse Characteristics

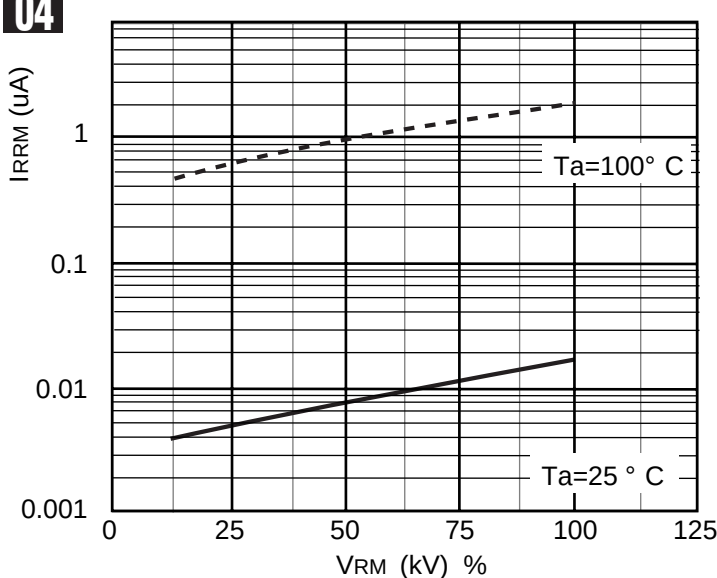
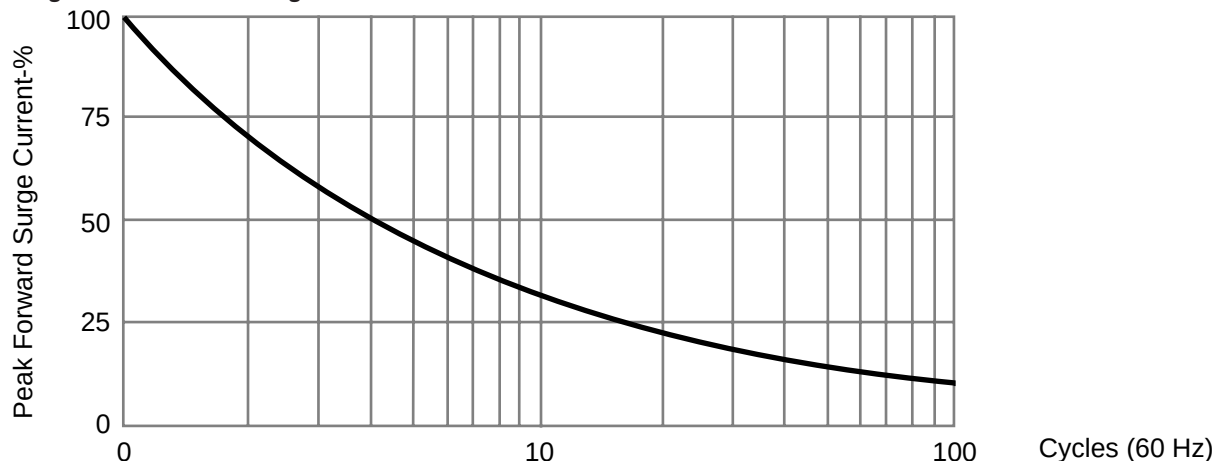


FIGURE 05 Repetitive Surge Current Derating Curve



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