

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:

1. High quality GPP silicon wafer chip structure.
2. Fast recovery time.
3. High current and high voltage design.
4. High Frequency.
5. Epoxy resin molded in vacuum.
6. Have anticorrosion in the surface.
7. UL94 V-0 Rated Material.

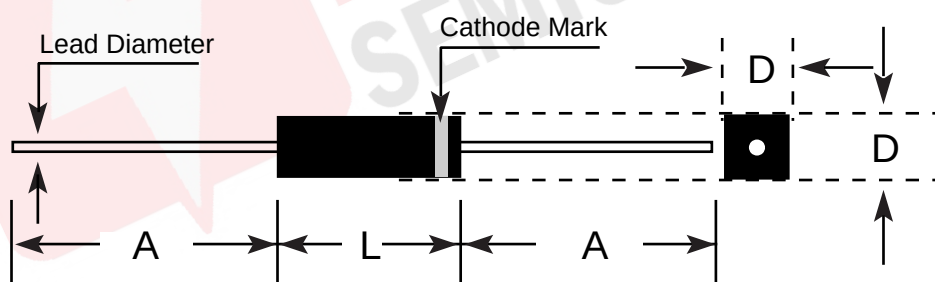
APPLICATIONS:

1. X-ray voltage doubling circuit.
2. Microwave frequency conversion rectification.
3. High voltage power supply for medical equipment.
4. Other high voltage rectifier circuits.

MECHANICAL DATA:

1. Case: Epoxy resin molding.
2. Terminal: Axis soft lead.
3. Net weight: 2.60 gram (approx).

PACKAGE SIZE:



HVM Series						
Lead Diameter 1.20± 0.03mm						
Dim.	Millimeters			Inches		
	Value	Min.	Max.	Value	Min.	Max.
D	7.5	7.3	7.7	0.295	0.287	0.303
L	22.0	21.8	22.2	0.866	0.858	0.874
A	22.0	22.0	--	0.866	0.866	--

REFERENCE SHAPE:

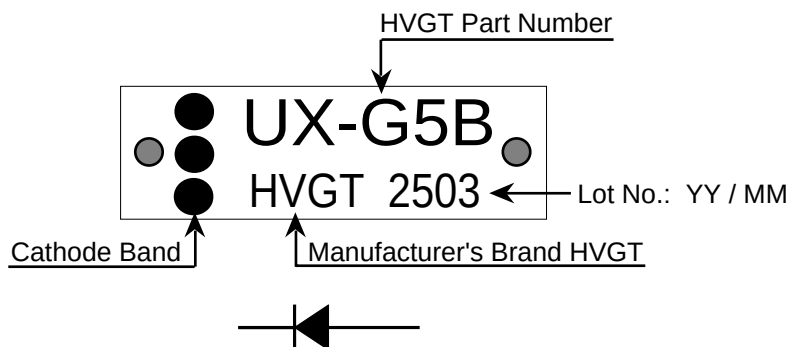


HVGT Name: HVM

Primary Characteristics

$I_F(AV)$	500	mA
V_{RRM}	7.5	kV
I_{FSM}	20	A
I_{RM}	5.0	uA
V_{FM}	11	V
T_{RR}	60	nS
$T_J(max.)$	125	° C

MARKING:



MAXIMUM RATINGS AND CHARACTERISTICS: ($T_a = 25^\circ C$, Ambient temperature unless stated otherwise.)

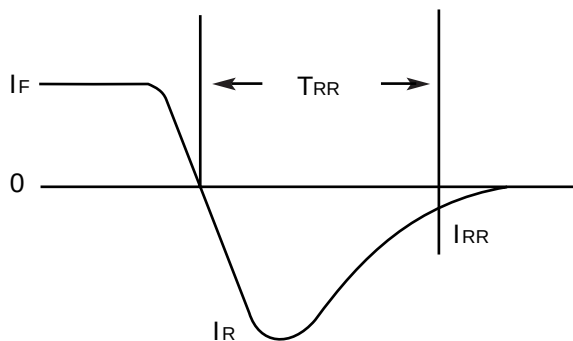
Items	Symbols	Condition	Data Value	Units
Maximum Repetitive Reverse Voltage	V_{RRM}	--	7.5	kV
Non-Repetitive Peak Reverse Voltage	V_{RSM}	--	9.0	kV
Maximum Average Forward Current	I_{FAVM}	$T_A = 55^\circ C$	500	mA
		$T_{OIL} = 55^\circ C$	900	mA
Non-Repetitive Forward Surge Current	I_{FSM}	60Hz Half-Sine Wave; 8.3ms	20	A
Maximum Junction Temperature	T_J		125	$^\circ C$
Allowable Operation Case Temperature	T_C		-40~125	$^\circ C$
Storage Temperature	T_{STG}		-55~150	$^\circ C$

ELECTRICAL CHARACTERISTICS: ($T_a = 25^\circ C$, Ambient temperature unless stated otherwise.)

Items	Symbols	Condition	Data Value	Units
Maximum Forward Voltage Drop	V_{FM}	At I_{FAVM}	11	V
Maximum Reverse Current	I_{R1}	At V_{RRM} , $T_A = 25^\circ C$	5.0	μA
	I_{R2}	At V_{RRM} , $T_A = 100^\circ C$	50	μA
Maximum Reverse Recovery Time	T_{RR}	$I_F = 50mA$; $I_R = 100mA$; $I_{RR} = 25mA$	60	nS
Min.Reverse Breakdown Voltage	V_Z	At $I_R = 100\mu A$	8.5	kV

Note: Specifications subject to change without notice. Photo is representation only.
 Standard package quantity: 500PCS/in Box.

FIGURE 01 Reverse Recovery Measurement Waveform



Typical data capture points: $I_F = 0.5I_R$, I_R , $I_{RR} = 0.25I_R$
 $I_R = 100mA$

FIGURE 02 Forward Current Derating Curve

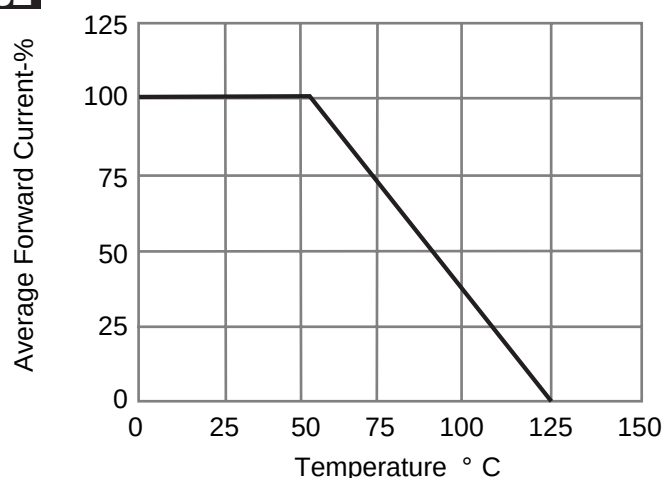


FIGURE 03 Forward Characteristics

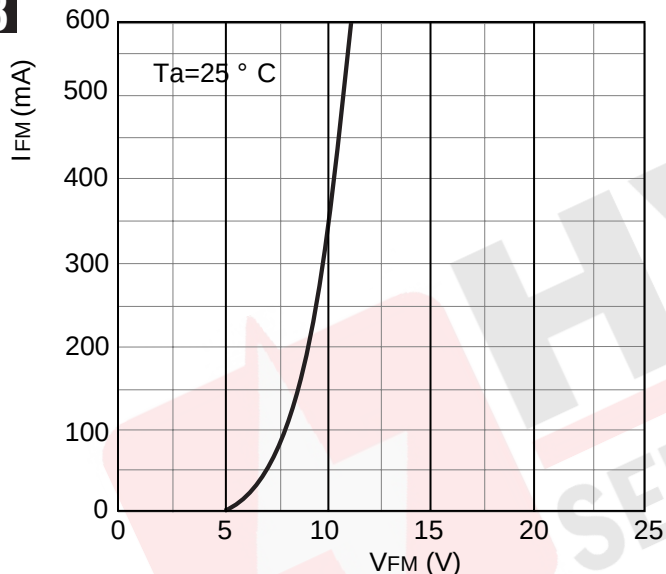


FIGURE 04 Reverse Characteristics

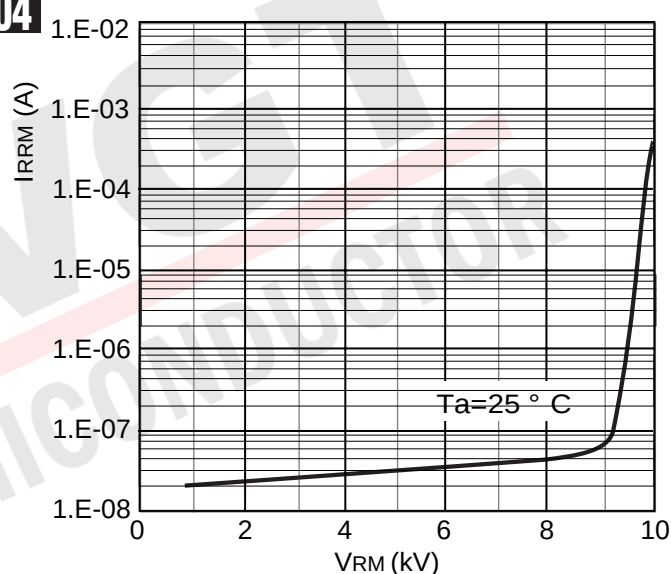
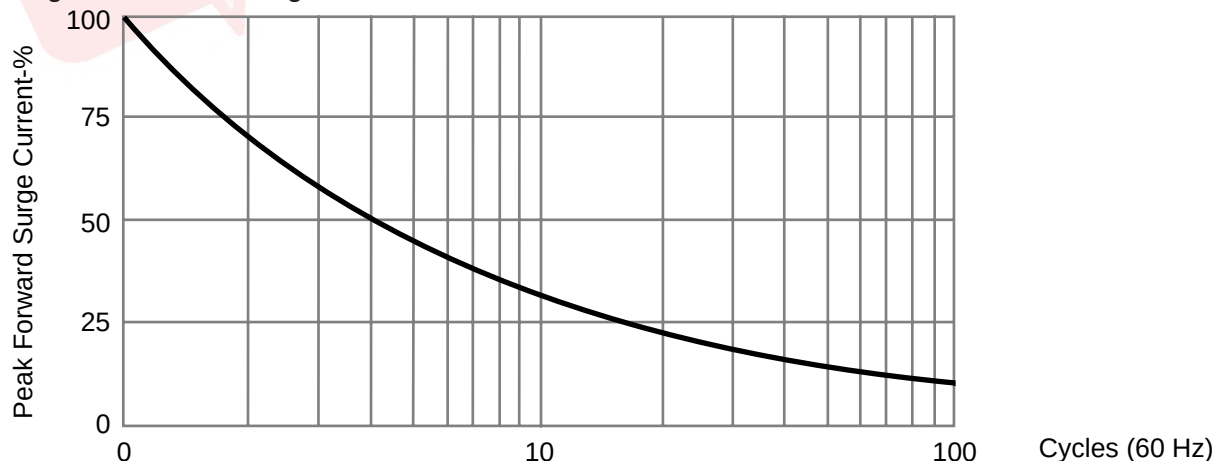


FIGURE 05 Repetitive Surge Current Derating Curve



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