

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 glass passivated silicon 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. HV power supply for precision instruments.
2. HV power supply for electromechanical equipment.
3. HV power supply for medical equipment.
4. Other high voltage rectifier circuits.

REFERENCE SHAPE:



HVGT Name: DO-721

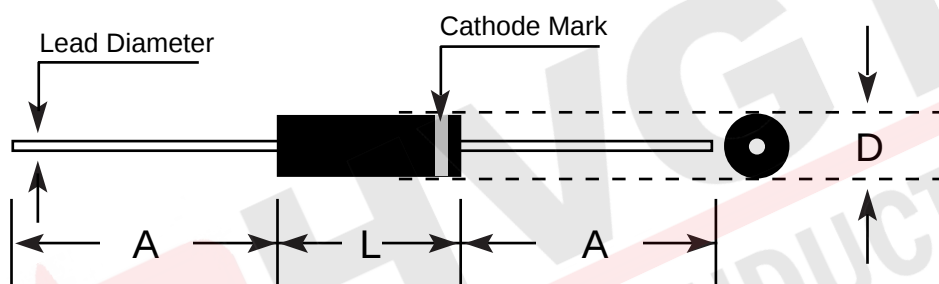
MECHANICAL DATA:

1. Case: Epoxy resin molding.
2. Terminal: Axis soft lead.
3. Net weight: 2.10 gram (approx).

Primary Characteristics

IF (AV)	VRRM	IFSM	IRM	VFM	T _{RR}	T _J (max.)
500	10	30	0.5	12	50	150
mA	kV	A	uA	V	nS	° C

PACKAGE SIZE:



DO-721 Series

Lead Diameter 1.20±0.03

Dim.	Millimeters			Inches		
	Value	Min.	Max.	Value	Min.	Max.
D	7.0	6.8	7.2	0.276	0.268	0.283
L	21.0	20.8	21.2	0.827	0.819	0.835
A	20.0	20.0	--	0.787	0.787	--

VERSION: Jun 2025

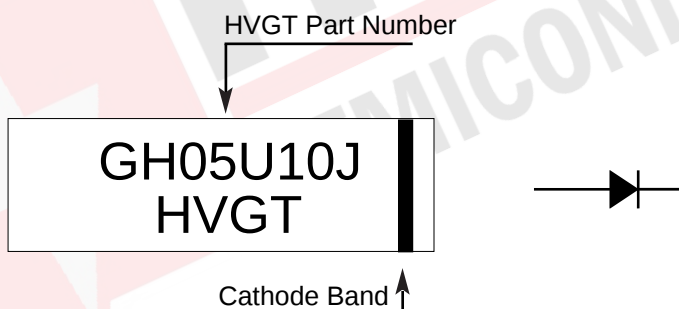
MAXIMUM RATINGS AND CHARACTERISTICS: (Ta=25° C, Ambient temperature unless stated otherwise.)

Items	Symbols	Condition	Data Value	Units
Maximum Repetitive Reverse Voltage	V_{RRM}	--	10.0	kV
Non-Repetitive Peak Reverse Voltage	V_{RSM}	--	12.0	kV
Maximum Average Forward Current	I_{FAVM}	$T_A = 50^\circ C$	500	mA
		$T_{OIL} = 55^\circ C$	600	mA
Non-Repetitive Forward Surge Current	I_{FSM}	60Hz Half-Sine Wave; 8.3mS	30	A
Maximum Junction Temperature	T_J		150	° C
Allowable Operation Case Temperature	T_C		-55~150	° C
Storage Temperature	T_{STG}		-55~175	° C

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

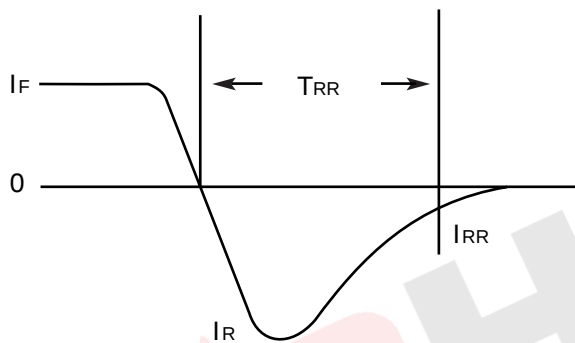
Items	Symbols	Condition	Data Value	Units
Maximum Forward Voltage Drop	V_{FM}	At I_{FAVM}	12.0	V
Maximum Reverse Current	I_{R1}	At V_{RRM} , $T_A = 25^\circ C$	0.5	uA
	I_{R2}	At V_{RRM} , $T_A = 100^\circ C$	20	uA
Maximum Reverse Recovery Time	T_{RR}	$I_F = 0.5I_R$; $I_R = I_{FAVM}$; $I_{RR} = 0.25I_R$	50	nS
Typical Junction Capacitance	C_J	At $V_R = 0VDC$, $f = 1MHz$	4.9	pF

MARKING:



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

FIGURE 02 Forward Current Derating Curve

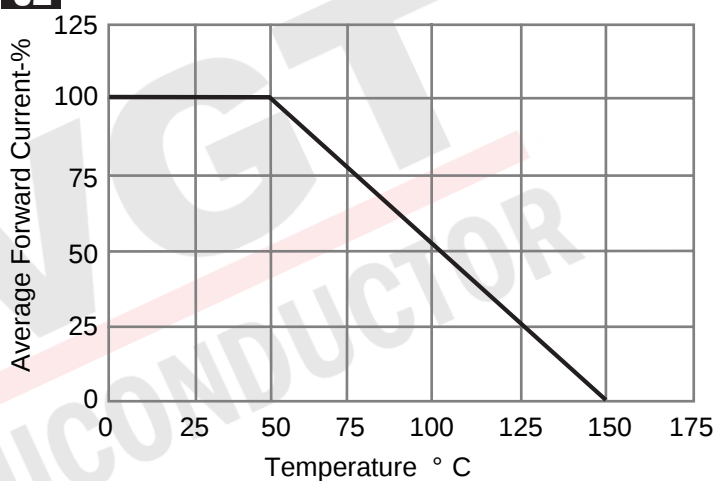


FIGURE 03 Forward Characteristics

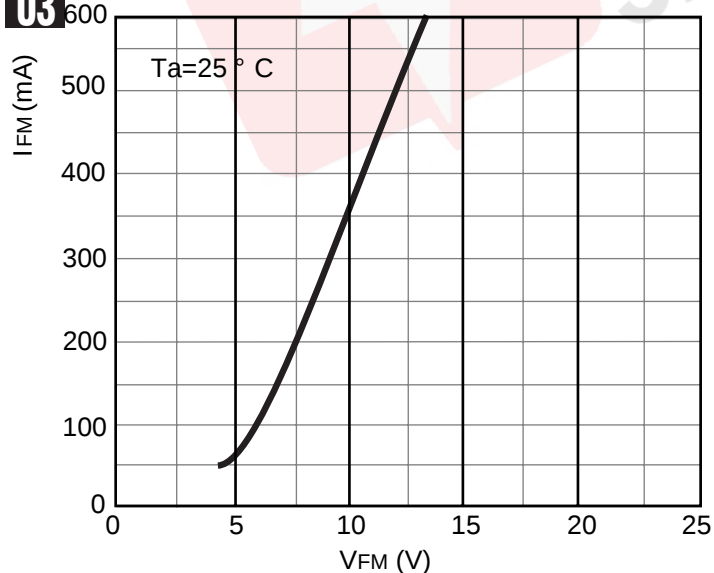


FIGURE 04 Reverse Characteristics

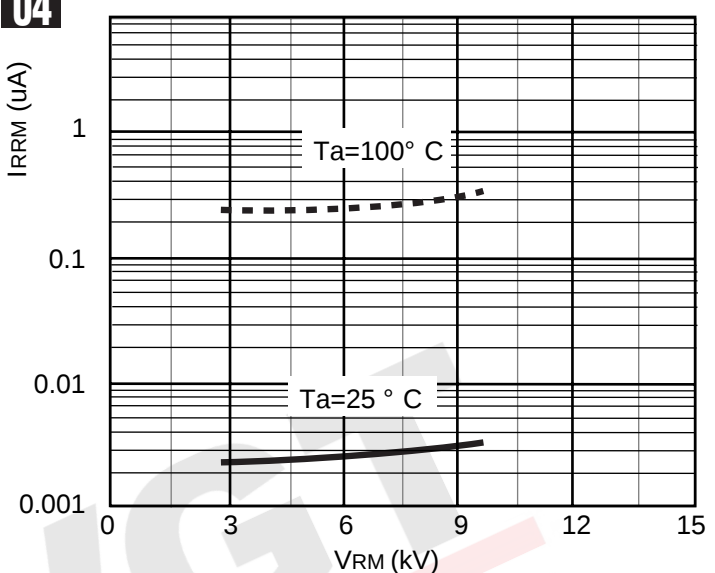
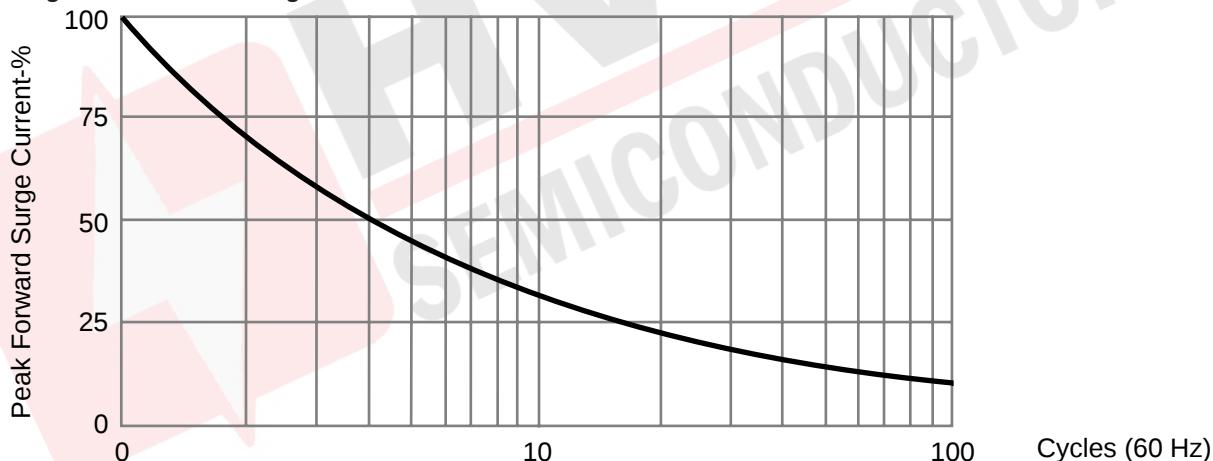


FIGURE 05 Repetitive Surge Current Derating Curve



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