

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.

SHAPE DISPLAY:



FEATURES:

1. High reliability design.
2. High voltage design.
3. High frequency .
4. Conform to RoHS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.

APPLICATIONS:

1. High voltage multiplier circuit
2. Electrostatic generator circuit .
3. General purpose high voltage rectifier.
4. Other.

MECHANICAL DATA:

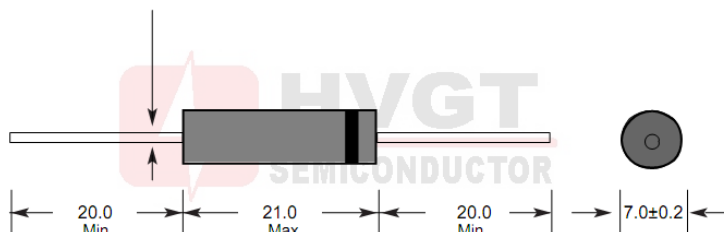
1. Case: epoxy resin molding.
2. Terminal: welding axis.
3. Net weight: 2.1 grams (approx).

SIZE: (Unit:mm)

HVGT NAME: DO-721

DO-721 Series

Lead Diameter 1.2mm



Unit:mm

MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)

Items	Symbols	Condition	Data Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	$T_a=25^{\circ}C$	12	kV
Average Output Current	I_F	$T_a=55^{\circ}C$; Resistive Load	450	mA
Surge Current	I_{FSM}	$T_a=25^{\circ}C$; 1/2 Sine(60Hz); 8.3mS	30	A
Junction Temperature	T_J		-40~+150	$^{\circ}C$
Allowable Operation Case Temperature	T_c		125	$^{\circ}C$
Storage Temperature	T_{STG}		-40~+150	$^{\circ}C$

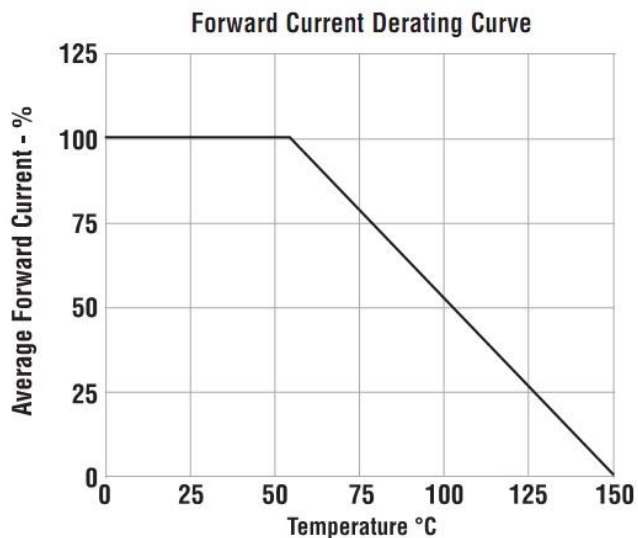
ELECTRICAL CHARACTERISTICS: $T_a=25^{\circ}C$ (Unless otherwise specified)

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	V_F	at $25^{\circ}C$; $I_F = I_{F(AV)}$	18	V
Maximum Reverse Current	I_{R1}	at $25^{\circ}C$; $V_R = V_{RRM}$	5.0	μA
	I_{R2}	at $100^{\circ}C$; $V_R = V_{RRM}$	50	μA
Maximum Reverse Recovery Time	T_{RR}	at $25^{\circ}C$; $I_F=0.5I_R$; $I_R=I_{FAVM}$; $I_{RR}=0.25I_R$	100	nS
Junction Capacitance	C_J	at $25^{\circ}C$; $V_R=0V$; $f=1MHz$	4.3	pF



Fig 1

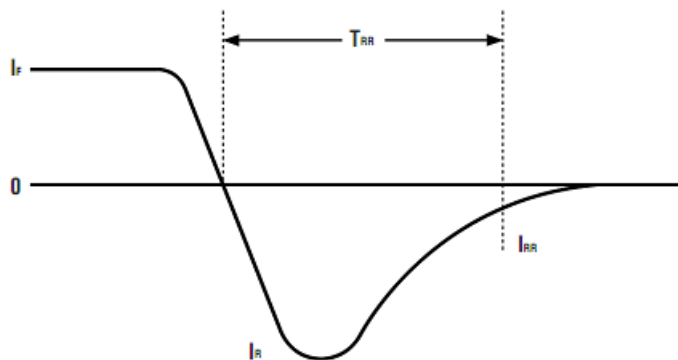
Forward Current Derating Curve



Average current rating at 55°C, unless otherwise specified.
Max operating temperature is 150°C, unless otherwise specified.

Fig 2

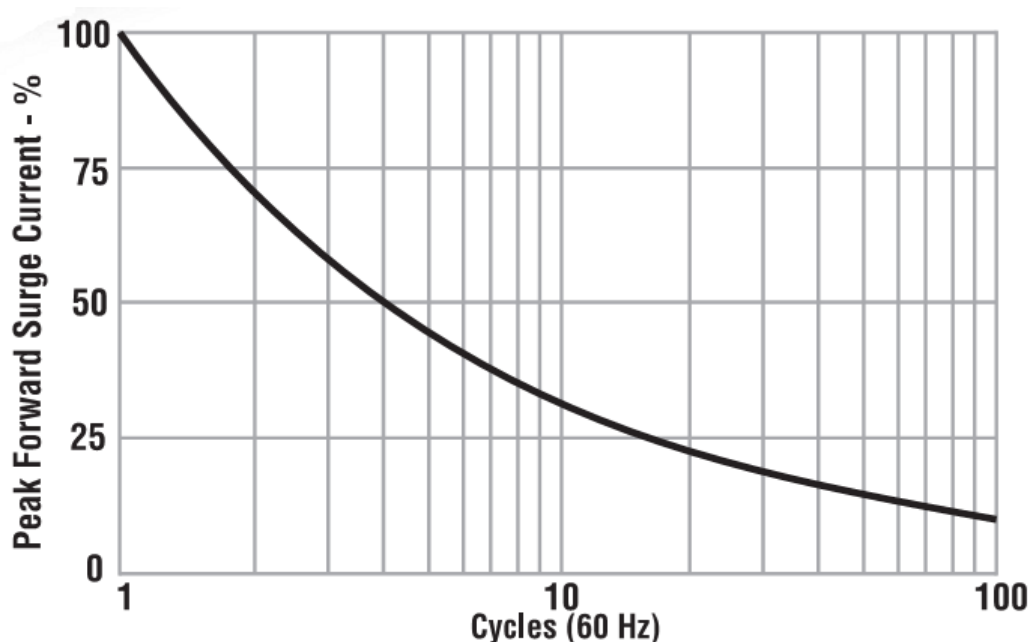
Reverse Recovery Measurement Waveform



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

Fig 3

Non-Repetitive Surge Current



Marking

Type

ESJC50F12

Code

ESJC50F12

Cathode Mark

