GH50-15J

500mA 15kV 50nS-High Voltage Power Diodes Ultra-Fast Recovery

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 reliability design.
2. High voltage design.
3. High frequency .
4. Conform to RoHS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.
6. Ultra-Fast Recovery.

APPLICATIONS:

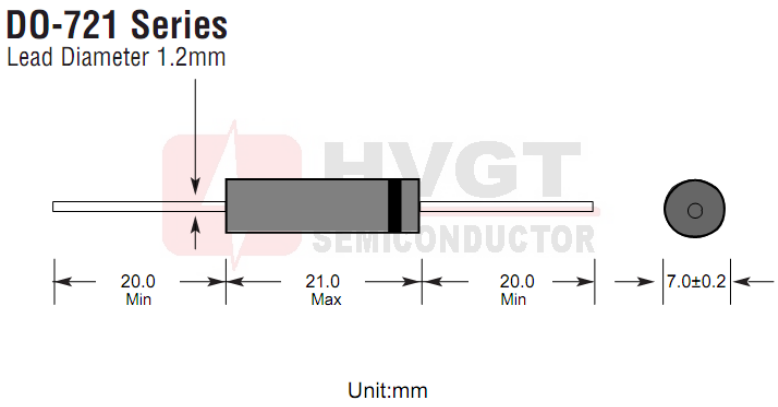
1. High voltage multiplier circuit
2. Electrostatic generator circuit .
3. General purpose high voltage rectifier.
4. Medical X-ray machine HV power supply.

MECHANICAL DATA:

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

SHAPE DISPLAY:

SIZE: (Unit:mm) **HVGT NAME: DO-721**



MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)

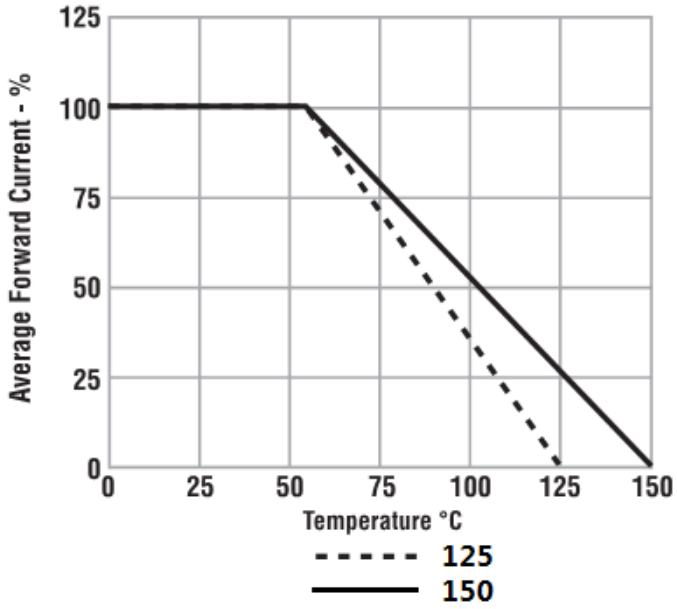
Items	Symbols	Condition	Data Value	Units
Repetitive Peak Renerse Voltage	V_{RRM}	Ta=25°C;	15	kV
Average Output Current	I_F	Ta=55°C;Resistive Load	500	mA
Suege Current	I_{FSM}	Ta=25°C; 1/2 Sine(60Hz)	20	A
Junction Temperature	T_J		-55~+150	°C
Allowable Operation Case Temperature	Tc		125	°C
Storage Temperature	T_{STG}		-55~+150	°C

ELECTRICAL CHARACTERISTICS: Ta=25°C (Unless otherwise specified)

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	V_F	at 25°C;I_F =$I_{F(AV)}$	16	V
Maximum Reverse Current	I_R1	at 25°C;V_R =V_{RRM}	0.5	uA
	I_R2	at 125°C;V_R =V_{RRM}	50	uA
Maximum Reverse Recovery Time	T_{RR}	at 25°C; I_F=0.5I_R; I_R=I_{FAVM}; I_{RR}=0.25I_R	50	nS
Junction Capacitance	C_J	at 25°C; V_R=0V; f=1MHz	3.5	pF

Fig 1

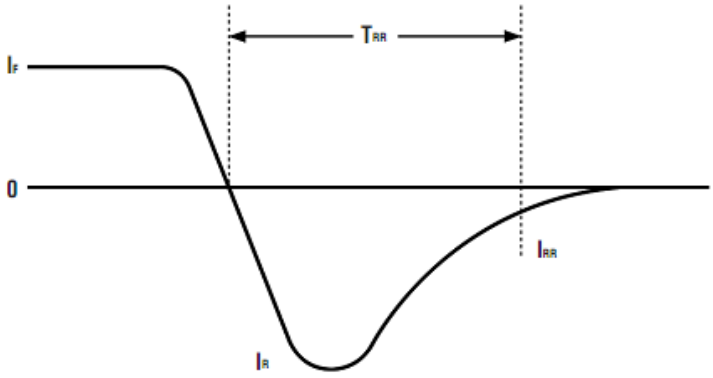
Forward Current Derating Curve



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

Fig 2

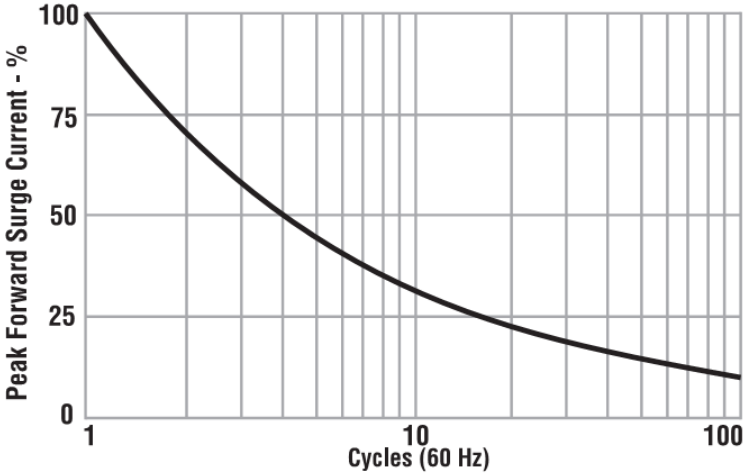
Reverse Recovery Measurement Waveform



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

Repetitive Surge Current Derating Curve



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

Fig 4

Reverse Characteristics