CL03-10F

300mA 10kV 80nS

High Voltage Medium Current Fast Recovery Diode

INTRODUCE:

HVGT high voltage silicon rectifier diodes is made of high quality silicon wafer chip and high reliability epoxy resin sealing structure, and through professional testing equipment inspection qualified after to customers.

FEATURES:

1. Avalanche characteristic.
2. High current, low forward voltage.
3. High frequency, Fast recovery.
4. Conform to RoHS and SGS.
5. Epoxy resin molded in vacuumHave anticorrosion in the surface.

APPLICATIONS:

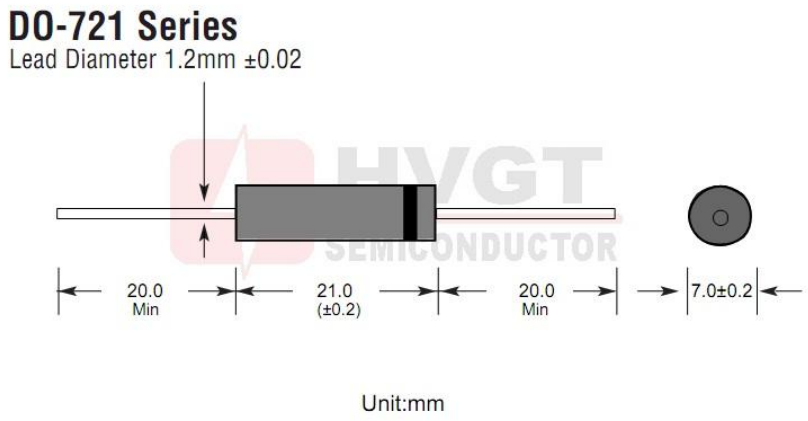
1. High voltage multiplier circuit
2. Electrostatic generator circuit .
3. General purpose high voltage rectifier.
4. X-ray power supply.

MECHANICAL DATA:

1. Case: epoxy resin molding.
2. Terminal: welding axis.
3. Net weight: 2.10 grams (approx).

SHAPE DISPLAY:

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



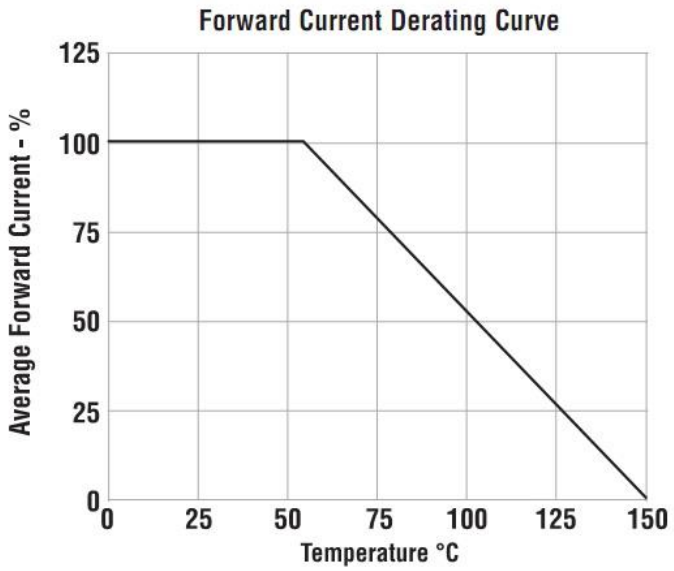
MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)

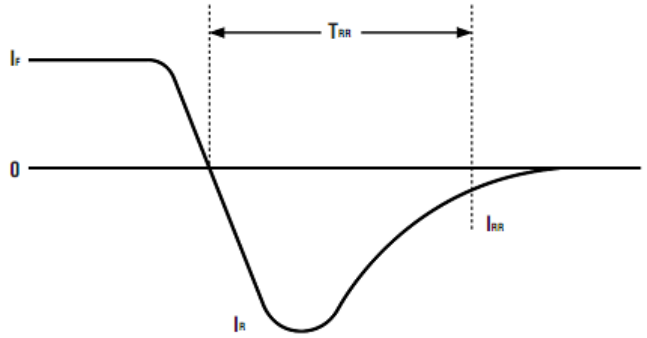
Items	Symbols	Condition	Data Value	Units
Repetitive Peak Renerse Voltage	V_{RRM}	T_A=25°C	10	kV
Non-Repetitive Peak Renerse Voltage	V_{RSM}	T_A=25°C	--	kV
Average Forward Current Maximum	I_{FAVM}	T_A=55°C	300	mA
		T_{OIL}=55°C	--	mA
Non-Repetitive Forward Surge Current	I_{FSM}	T_A=25°C; 50Hz Half-Sine Wave; 8.3mS	20	A
Junction Temperature	T_J		150	°C
Allowable Operation Case Temperature	Tc		-40~+150	°C
Storage Temperature	T_{STG}		-40~+150	°C

ELECTRICAL CHARACTERISTICS: T_A=25°C (Unless Otherwise Specified)

Items	Symbols	Condition	Data value	Units
Maximum Forward Voltage Drop	V_{FM}	at 25°C; at I_{FAVM}	25	V
Maximum Reverse Current	I_{R1}	at 25°C; at V_{RRM}	2.0	uA
	I_{R2}	at 100°C; at V_{RRM}	10	uA
Maximum Reverse Recovery Time	T_{RR}	at 25°C; I_F=0.5I_R; I_R=I_{FAVM}; I_{RR}=0.25I_R	80	nS
Junction Capacitance	C_J	at 25°C; V_R=0V; f=1MHz	5.3	pF

Fig 1	Fig 2
Forward Current Derating Curve	**Reverse Recovery Measurement Waveform**

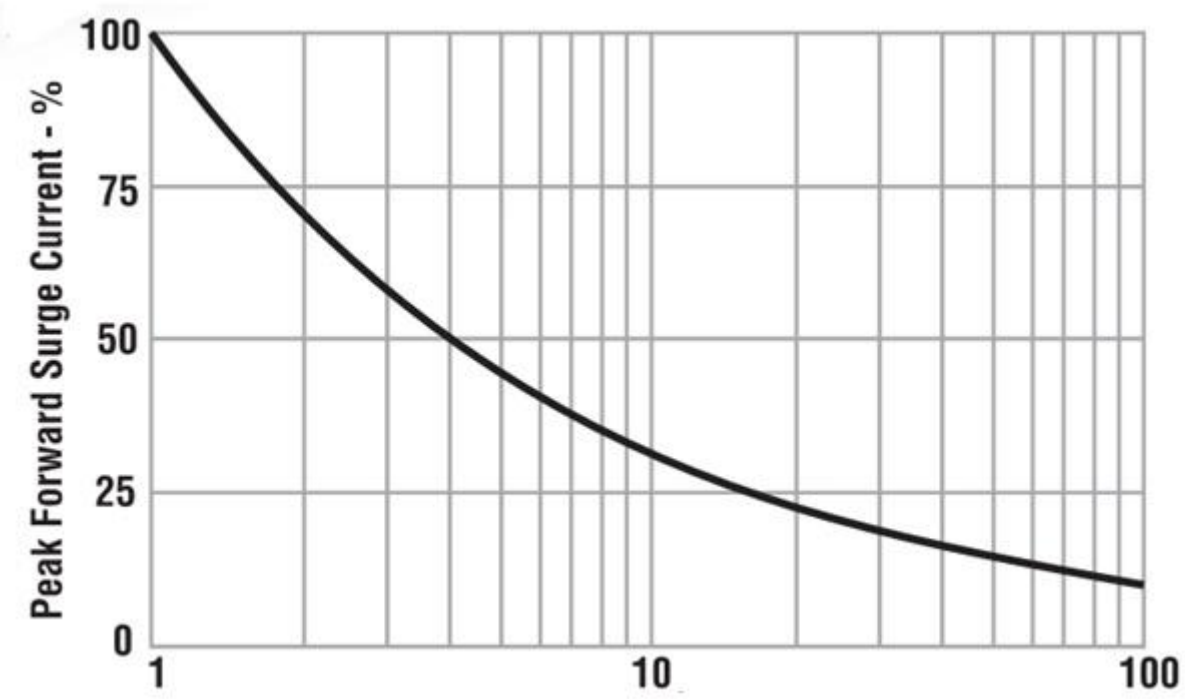




Typical data capture points: I_F =0.5I_R , I_R,I_{RR} =0.25I_R
I_R is typically the rated average forward current maximum (I_{FAVM}) of the D.U.T

Fig 3

Non-Repetitive Surge Current



Marking	Type	Code	Cathode Mark
	CL03-10F	CL03-10F HVGT	