

### 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:

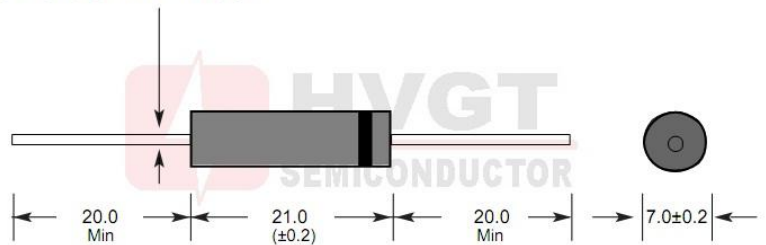


SIZE: (Unit:mm)

HVGT NAME: DO-721

### DO-721 Series

Lead Diameter 1.2mm ±0.02



Unit:mm

### MAXIMUM RATINGS AND CHARACTERISTICS: (Absolute Maximum Ratings)

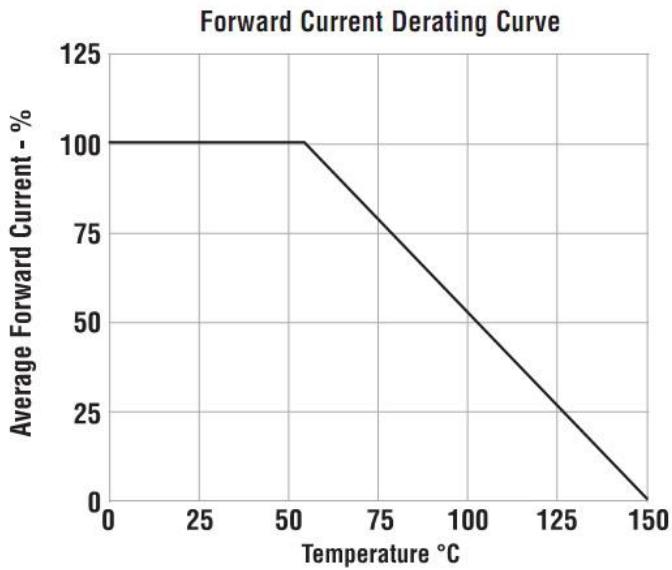
Items	Symbols	Condition	Data Value	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$	$T_A=25^{\circ}C$	15	kV
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	$T_A=25^{\circ}C$	--	kV
Average Forward Current Maximum	$I_{FAVM}$	$T_A=55^{\circ}C$	200	mA
		$T_{OIL}=55^{\circ}C$	--	mA
Non-Repetitive Forward Surge Current	$I_{FSM}$	$T_A=25^{\circ}C$ ; 50Hz Half-Sine Wave; 8.3mS	20	A
Junction Temperature	$T_J$		150	$^{\circ}C$
Allowable Operation Case Temperature	$T_C$		-40~+150	$^{\circ}C$
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	$V_{FM}$	at $25^{\circ}C$ ; at $I_{FAVM}$	35	V
Maximum Reverse Current	$I_{R1}$	at $25^{\circ}C$ ; at $V_{RRM}$	2.0	$\mu A$
	$I_{R2}$	at $100^{\circ}C$ ; at $V_{RRM}$	10	$\mu A$
Maximum Reverse Recovery Time	$T_{RR}$	at $25^{\circ}C$ ; $I_F=0.5I_R$ ; $I_R=I_{FAVM}$ ; $I_{RR}=0.25I_R$	80	nS
Junction Capacitance	$C_J$	at $25^{\circ}C$ ; $V_R=0V$ ; $f=1MHz$	3.5	pF

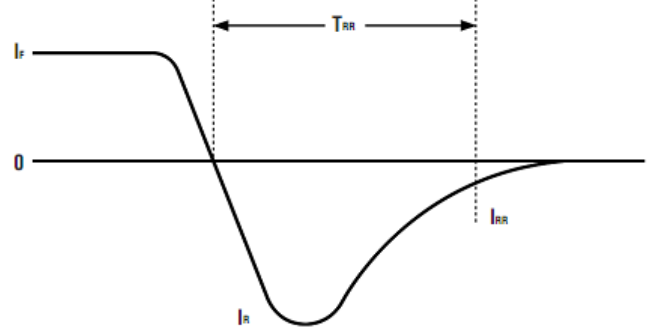
**Fig 1**

**Forward Current Derating Curve**



**Fig 2**

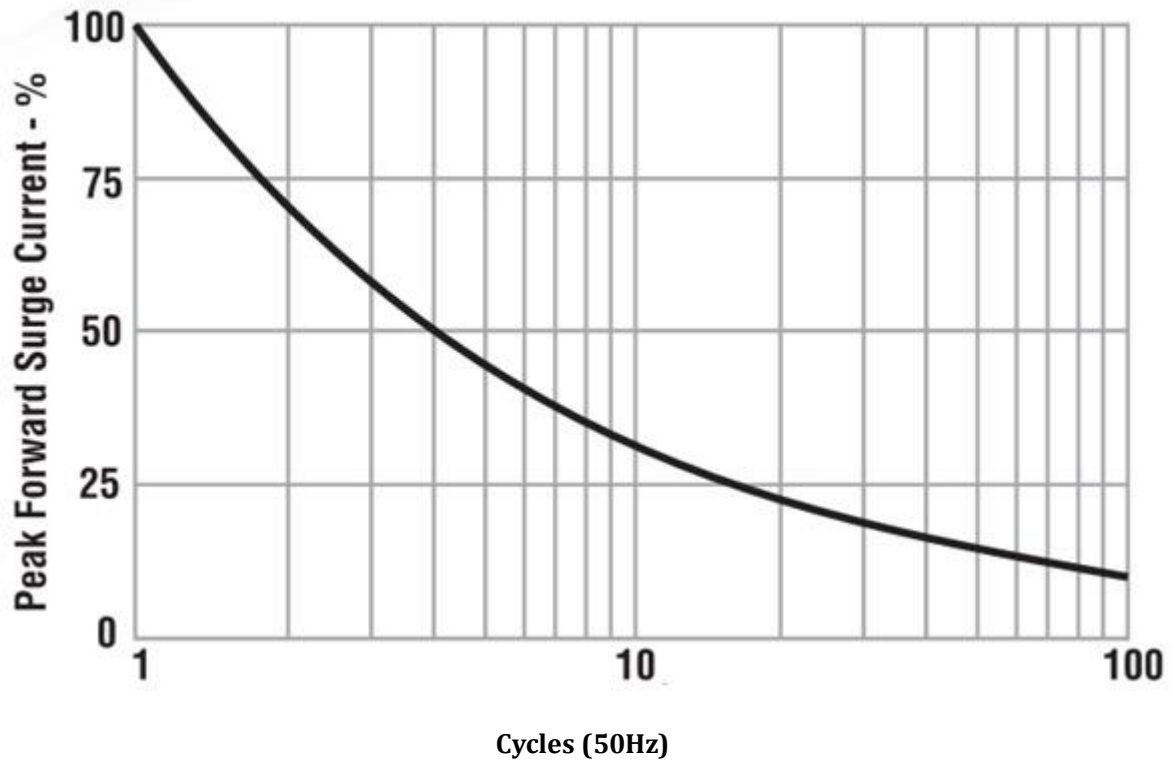
**Reverse Recovery Measurement Waveform**



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	Code	Cathode Mark
	CL03-15F	CL03-15F HVGT	