Fast Recovery High Voltage Diodes

CL03 Series: 120~400mA , 8.0~30kV, 70~100nS.

INTRODUCE:

HVGT brand 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. Design of glass passivation chip(GPP).
2. Fast recovery time.
3. Axial Lead.
4. Medium current design.
5. Epoxy resin molded in vacuum.
6. Have anticorrosion in the surface.
7. ANSI/UL94 V-0 Rated Material.

APPLICATIONS:

1. Detecting equipment.
2. General purpose high voltage rectifier.
3. X-ray voltage doubling circuit.
4. Microwave transmission power supply.

REFERENCE SHAPE:

HVGT SEMI Package Naming: DO-721

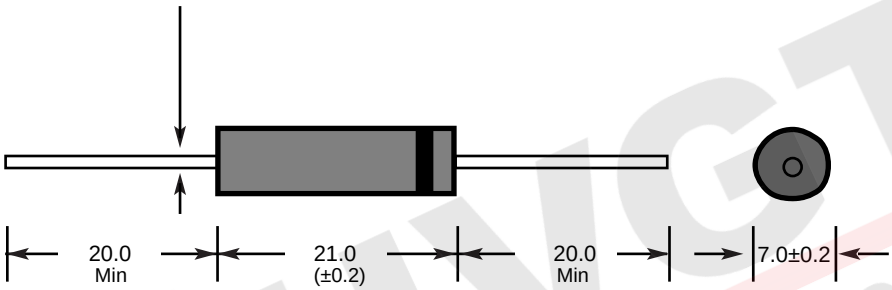
MECHANICAL DATA:

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

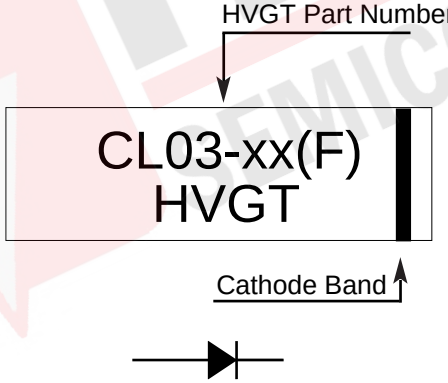
DRAWINGS: (Unit:mm)

DO-721 Series

Lead Diameter 1.2mm ±0.02



MARKING:



RoHS COMPLIANT

GETE ELECTRONIC CO.,LTD Http://www.getedz.com Http://www.hvgtsemi.com E-mai: sales@getedz.com
GETAI ELECTRONIC DEVICE CO.,LTD TEL:0086-20-8184 9628 FAX:0086-20-8184 9638

HVGT SEMICONDUCTOR

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Maximum Ratings And Characteristics: (25°C ambient temperature unless stated otherwise.)

HVGT Part Number	V_{RRM} kV	I_{FAVM1} mA	I_{FAVM2} mA	V_F V	I_{R1} uA	I_{R2} uA	I_{FSM} A	T_{RR} nS	C_J pF
CL03-08	8.0	400	720	17.0	2.0	20.0	20	100	6.2
CL03-08F	8.0	350	630	19.0	2.0	20.0	20	70	6.2
CL03-10	10.0	300	540	18.0	2.0	20.0	20	100	5.3
CL03-10F	10.0	250	450	21.0	2.0	20.0	20	70	5.3
CL03-12	12.0	250	450	21.0	2.0	20.0	20	100	4.4
CL03-12F	12.0	200	360	23.0	2.0	20.0	20	70	4.4
CL03-15	15.0	200	360	23.0	2.0	20.0	20	100	3.5
CL03-15F	15.0	150	270	26.5	2.0	20.0	20	70	3.5
CL03-20	20.0	120	216	30.0	2.0	20.0	20	100	2.8
CL03-25	25.0	120	216	34.0	2.0	20.0	20	100	2.4
CL03-30	30.0	120	216	38.0	2.0	20.0	20	100	2.5

Temperature:

Storage Temperature: -55 to 175 °C

Operating Temperature: -55 to 125 °C (CL03-25,CL03-30)
-55 to 150 °C (All other part number)

Maximum Junction Temperature: 125 °C (CL03-25,CL03-30)
150 °C (All other part number)

Specification Definitions:

Symbols	Items	Condition
V_{RRM}	Maximum Repetitive Reverse Voltage	--
I_{FAVM1}	Maximum Average Forward Current	At T_A = 55°C
I_{FAVM2}	Maximum Average Forward Current	At T_{oil}= 55°C
V_F	Maximum Forward Voltage Drop	At I_{FAVM}
I_{R1}	Maximum Leakage Current	At V_{RRM} T_A = 25°C
I_{R2}	Maximum Leakage Current	At V_{RRM} T_{oil}= 100°C
I_{FSM}	Maximum Surge Current	At 8.3 mS, Single Half Sine
T_{RR}	Maximum Reverse Recovery Time	I_F= 0.5 I_{FAVM} ; I_R = -I_{FAVM} ; I_{RR} = -0.25 I_{FAVM}
C_J	Typical Junction Capacitance	At V_R = 0VDC, f = 1MHz

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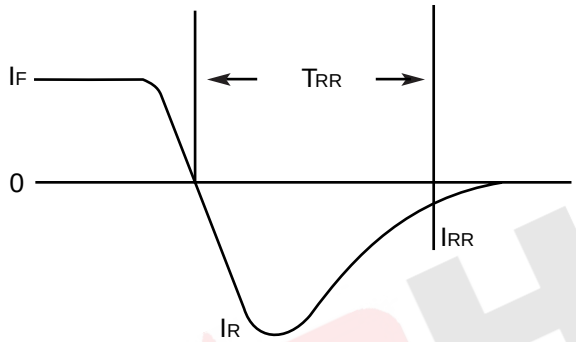
FIGURE 01 Reverse Recovery Measurement Waveform



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

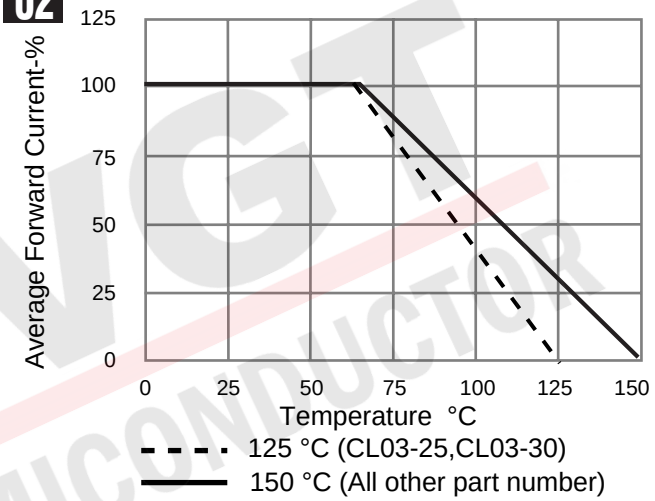


FIGURE 03 Positive Characteristic Curve

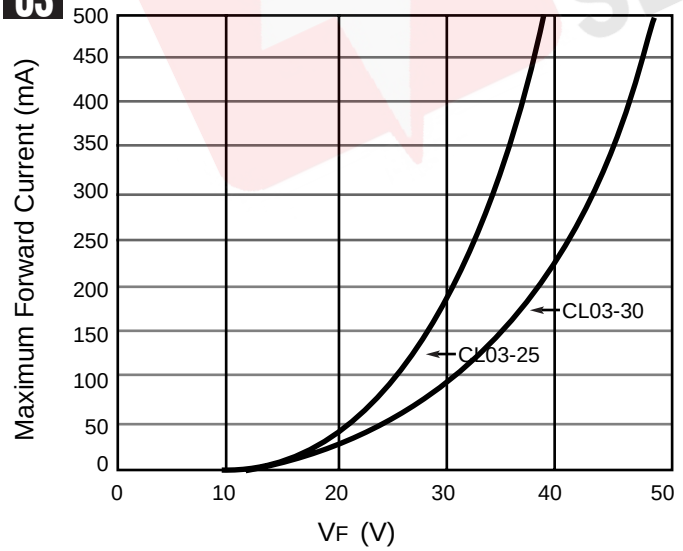


FIGURE 04 Reverse Leakage Current Curve With Voltage Variation

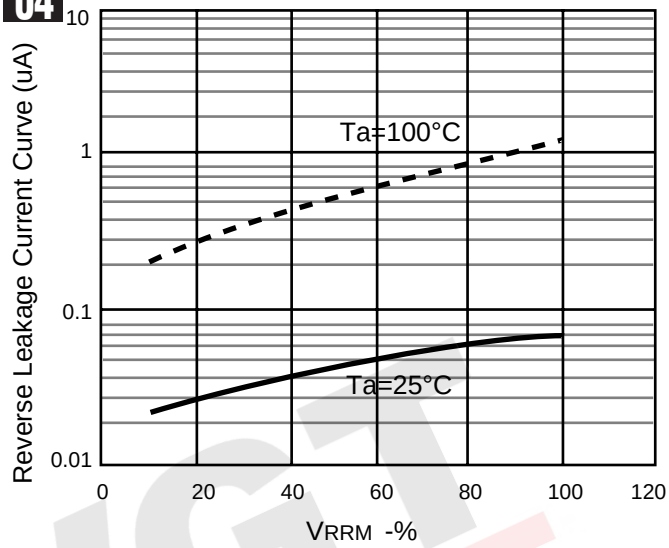
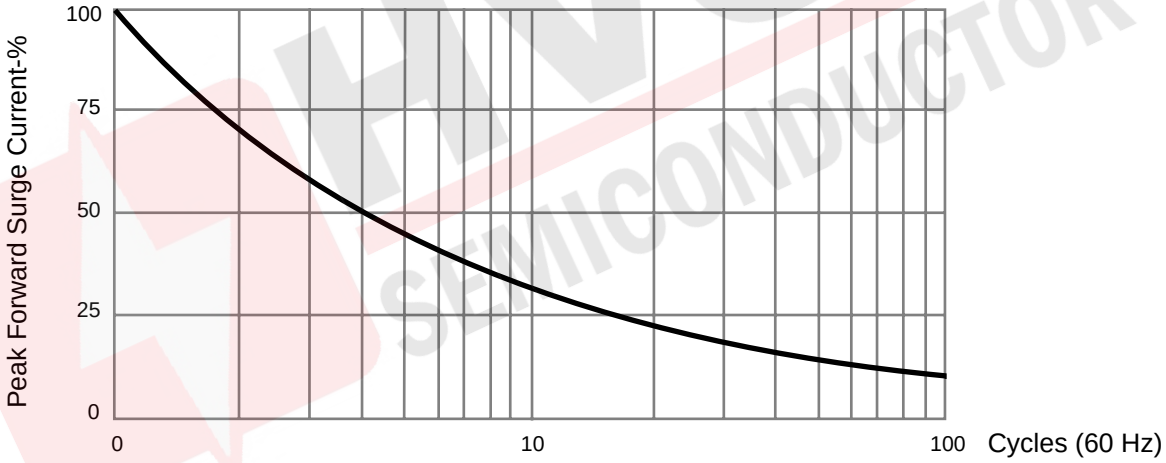


FIGURE 05 Repetitive Surge Current Derating Curve



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

Note: Specifications subject to change without notice. Photo is representation only.
Standard package quantity:500PCS/in Box.