

GL108 Specification

Anode Characteristics

Peak Forward Anode Voltage:	35kV
Peak Forward Anode Current:	5kA
Peak Reverse Anode Voltage :	18kV
Peak Reverse Anode Current:	2.5kA
Average Anode Current:	2A
Anode Current Pulse Duration:	0.35us
Anode Dissipation Factor:	50×10^9
Anode Current Rate of Rise:	5×10^{10} A/s [1]

Grid 2 Drive

Peak Open Circuit Trigger Voltage :	500V ~ 1500V
Driver Circuit Output Impedance:	$25\Omega \sim 250\Omega$
Driver Pulse Rise Time:	0 ~ 150 ns
Driver Pulse Width:	1 us ~ 2 us
Bias Voltage (negative):	0 ~ 300 V
Anode Delay Time:	0 ~ 500ns
Anode Delay Time Drift:	0 ~ 150ns

Grid 1 DC Drive

DC grid 1 unloaded priming voltage :	0 ~ 300V
DC grid 1 priming current:	50mA ~ 100 mA

Grid 1 Pulse Drive

Unload grid 1 drive pulse voltage:	500V ~ 1500V
Grid 1 pulse duration:	2us min
Rate of rise of grid 1 pulse:	1kV/us
Peak inverse grid 1 voltage:	200V max
Drive current:	1A ~ 3A

Cathode And Reservoir Heater

Cathode heater voltage:	$6.3V \pm 5\%$
Cathode Heater current:	14A ~ 16A
Reservoir heater voltage:	$6.3V \pm 5\%$
Reservoir heater current:	4A ~ 5A
Cathode heating time:	5min

Mechanical Characteristics

Dimension and tube connections:	See dimensional date
Net weight:	About 1500g
Mounting position:	Any [2]
Cooling way:	Forced-air or liquid immersion [3]

Notes

[1] This rate of rise refers to that part of the leading edge of the pulse between 26% and 70% of the pulse amplitude.

[2] The tube must be mounted by means of its cathode mounting flange.

[3] The temperature of the envelope must not exceed the value specified below.

Ceramic, anode and grids below 150°C. Cathode mounting flange and base below 120°C.

GL108 Deuterium Thyatron

Dimensional Data

