

Technical Specifications: HY11

HYDROGEN THYRATRON

The HY11 is a compact, fault tolerant, switch that is designed for capacitor discharge service. It is suitable for use in pulsed gas lasers.

Key Features:

- Short pulse peak current up to 3 kA
- Voltage blocking up to 20kV
- Mounting flange is at cathode potential
- Compact metal to ceramic construction
- Mountable in any direction
- Incorporates a reservoir to maintain gas pressure as the thyratron ages



Specifications

MAXIMUM RATINGS		UNITS
Max Peak Anode Voltage (epy)	20	kV
Max Peak Anode Current (ib)*	500	Α
Max Average Anode Current (lb)	0.5	ADC
RMS Anode Current (Ip)**	8	ARMS
Max Anode Current Rate of Rise (dib/dt)	2,000	A/µs
Anode Delay Time (tad)	0.5	μs
Max Time Jitter (tj)	0.005	μs
	-55° to	
Ambient Temp	+75°	С

ANCILLARY SUPPLIES	Nom.	Min.	Max	Units
Peak Grid Voltage (egy)	-	200	800	V
Grid Voltage Pulse Width (tp)	-	2	-	μs
Grid Voltage Rise Time (tr)	-	-	0.35	μs
Grid Drive Source Impedance (Zg)	-	250	500	Ω
Negative Grid Bias (Ecc)	-	-	200	VDC
Heater Voltage (Ef)	6.3	5.8	6.8	VAC/VDC
Heater Current at 6.3 V (If)	-	5.8	9.0	VAC/VDC
Reservoir Voltage (Eres)	6.3	5.8	6.8	VAC/VDC
Reservoir Current at 6.3 V (Ires)	-	1	5	VAC/VDC
Warm-up Time (tk)	-	5	-	min.

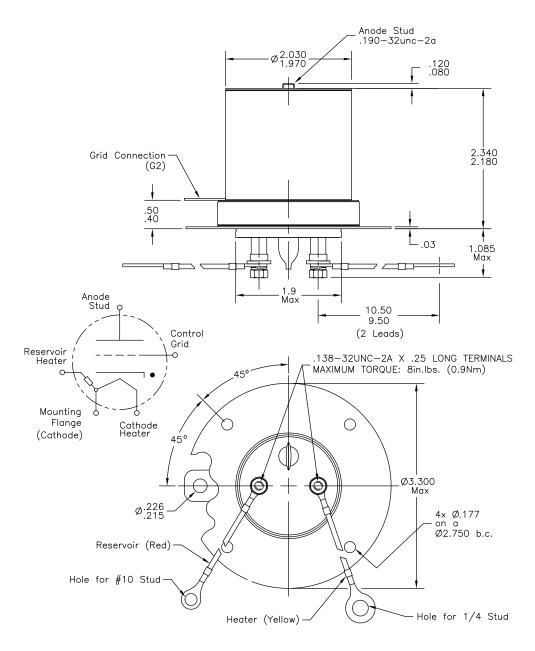
^{*}For sub-microsecond applications with duty (pps x tp) less than 0.0001, a peak anode current rating of 3,000 A is achievable.

^{**} The root mean square anode current (Ip) shall be computed as (ib x Ib)^0.5.





Outline Drawing:



Dimensions in inches

Specifications are subject to change without notice.





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