Technical Specification: 8613/HY1A

HYDROGEN THYRATRON

The 8613/HY1A is a hydrogen-filled, triode thyratron equipped with a jumbo four pin bayonet base. It features a hydrogen reservoir, connected internally directly across the heater cathode, for long, reliable lifetime.

The 8613/HY1A is a plug-in replacement for the 5C22 glass hydrogen thyratron. The ruggedness and small size, possible with ceramic construction, makes this tube suitable for use in compact modulators of high performance systems. The 8613/HY1A is tested and inspected to NAVSEA Specifications.

SPECIFICATIONS:

MAXIMUM RATINGS		UNITS
Max Peak Anode Voltage (epy)	16	kV
Max Peak Anode Current (ib)	500	A
Max Average Anode Current (Ib)	0.5	ADC
RMS Anode Current (Ip)*	8	ARMS
Maximum Pb, (epy x ib x pps)	10 x 10^9	V*A*pps
Max Anode Current Rate of Rise (dik/dt)	2,000	A/µs
Anode Delay Time (tad) **	0.5	µs
Anode Delay Time Drift (Δtad)	0.1	µs
Max Time Jitter (tj)	0.005	µs
Ambient Temp	-55° to +125°	C

ANCILLARY SUPPLIES NOM. MIN. MAX. UNITS	Nom.	Min.	Max	Units
Peak Grid Voltage (egy)	-	175	600	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)	-	6	11.5	VAC/VDC
Warm-up Time (tk)	-	3	-	Minutes

* The root mean square anode current is computed as the square root of the product of peak current and average current: $Ip = [ib*Ib]^{1/2}$

** Measured @ epy = 10kV, ib = 100A.

Specifications are subject to change without notice

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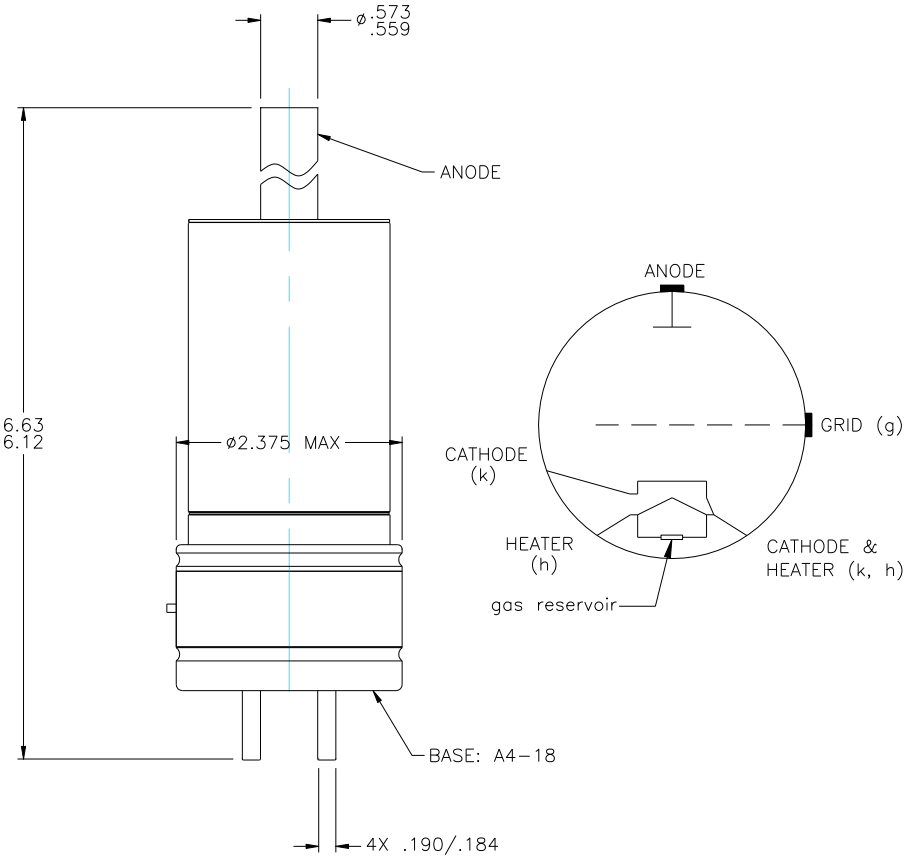
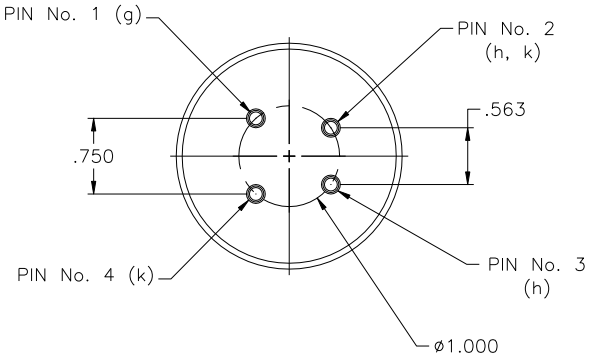
OUTLINE DRAWING:





(Dimensions are in inches)

Accessories:

Socket: 122-0244-200
Anode Connector: C1-5-CONN/36001 or HR8

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Made In The USA

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