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New . . .

CERAMIC-METAL HYDROGEN THYRATRON

MODEL 7621/HY-2

DATA SHEET # 070

The 7621/HY-2 is a small, ceramic-metal envelope hydrogen thyatron requiring only 30 seconds cathode and reservoir filament warm-up time. It is unique in that it can switch 350 kw peak power in spite of its small size.

The 7621/HY-2 can be used in applications where 1258, 3C45 and 4C35 glass envelope thyatrons are presently being used or contemplated. Extended life is provided by a hydrogen reservoir which is connected internally across the cathode filament.

The rugged construction of the 7621/HY-2 makes it ideal for applications in which components will be subjected to extremes of shock and vibration. Under test the 7621/HY-2 has withstood shock of 200 g at 11 ms duration and vibration from 0-2000 cps at 20 g.



ACTUAL SIZE

Operation at $+125^{\circ}\text{C}$ ambient temperature is possible without forced cooling when the tube is operated at its maximum plate dissipation factor (P_b) of 2.7×10^6 .

The 7621/HY-2 comes equipped with a cathode flange for mounting, and through-hole tabs to which filament and grid connections are made. Special design of separate mounting sockets is no longer necessary. Flexible wire leads are also eliminated.

This small, lightweight ceramic-metal tube is ideally suited for compact modulator design for missile, airborne, shipboard, and ground-based applications where size and weight are of major consideration.

Besides the 7621/HY-2 described above, EG&G manufactures a variety of other ceramic-metal miniaturized hydrogen thyatrons and hydrogen diodes.

For complete details, write to the Applications Engineering Group.

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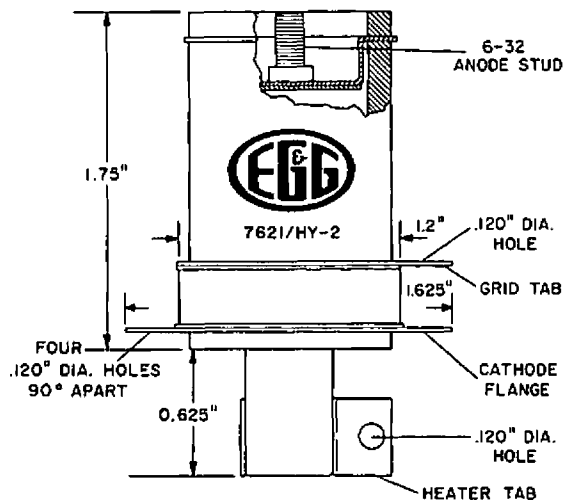
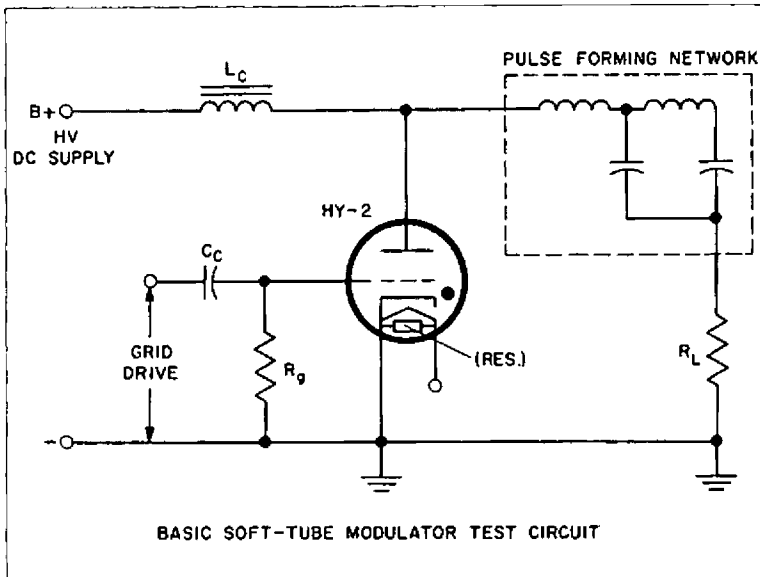


EDGERTON, GERMESHAUSEN & GRIER, INC.

160 BROOKLINE AVENUE, BOSTON 15, MASSACHUSETTS

TEL. Copley 7-9700 • CABLE: EGGINC, BOSTON; TWX: BS1099

WESTERN OPERATIONS 300 Wall Street, Las Vegas, Nev. — Santa Barbara Airport, P.O. Box 98, Goleta, Calif.



GENERAL SPECIFICATIONS

ELECTRICAL (Absolute Maximum)

Peak Anode Voltage (epy)	8 kv
Peak Anode Current (ib)	100 amps
Average Anode Current (Ib)	100 mAdc
Cathode RMS Current (Ip)	2 Aac
Pulse Repetition Rate (prp)	50,000 pps
Plate Dissipation Factor	2.7×10^9
$(P_b = \text{epy} \times \text{prp} \times i_b)$	
Filament Warm-up Time (tk)	30 sec. (@ 6.3v)
Peak Power Switching (p_o)	350 kw

GRID DRIVE

Peak Grid Trigger Voltage	175 volts (Min.)
Grid Drive Impedance	1200 ohms (Max.)
Grid Pulse Duration	1.0 μ sec (Min.)

HEATER POWER

I_f (@ $E_f = 6.3v$)	3.2 amps (Max.)
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MECHANICAL

Length	2-3/8" nominal
Diameter	1-1/5" nominal
Weight	0.13 lb.
Ambient Temperature	-65°C to +125°C
Mounting	Any position

DATA AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

PRODUCTS — milli-mike® Oscilloscopes, Pulse Generators and Accessories • Hydrogen Thyratrons • Hydrogen Diodes • Triggered Spark Gaps • Xenon Flash Tubes • Laser Stimulators • Dosimeters • Flash Machines & Circuits • Oceanographic Equipment • Transformers • CAPABILITIES — Project Management • Systems Engineering • Research & Development



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