

ENGINEERING DATA

E-284 3-17-58

CBS-HYTRON

TUBES AND SEMICONDUCTORS

A Division of Columbia Broadcasting System, Inc.
Danvers, Massachusetts

CBS TYPE 7205

COLD - CATHODE TRIGGER TUBE

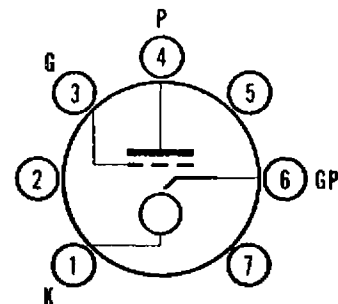
The 7205 is a cold-cathode miniature trigger and timer tube used in applications where high hold-off voltage, short anode delay times, minimum anode delay variation and high pulse currents are required. Because of its special construction the 7205 will withstand a wide ambient temperature range, impact shocks with 100g peaks, and severe vibrational stresses. Because of its dark-start design characteristic, the 7205 will operate in sealed enclosures and after storage periods without requiring incident light or other extraneous energies to initiate the glow discharge.

MECHANICAL DATA

Cathode	cold
Bulb	T5 1/2
Base	Min. button 7 pin, 2" flying leads
Mounting Position	Any
Overall Height (not including leads)	1 3/4 inch
Maximum Diameter	3/4 inch

LEAD CONNECTIONS

- Pin 1. Cathode
- Pin 2. Omitted
- Pin 3. Grid
- Pin 4. Anode
- Pin 5. Omitted
- Pin 6. Glow Pin
- Pin 7. Omitted



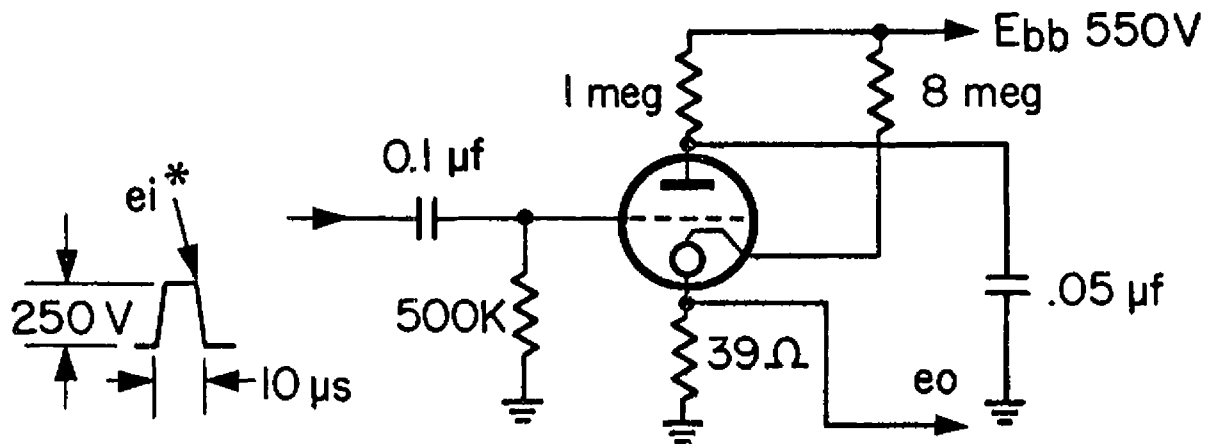
ELECTRICAL DATA

Maximum Ratings (Absolute Maximum Values)

Anode Operating Voltage	1000 volts
Hold-off Voltage	2000 volts
Cathode Current Peak	500 amp
Glow Current	100 μ A
Grid Resistor	2.0 meg
Discharge Capacitor	0.5 μ f
Power Input	1.0 W
Grid Bias	$\pm$ 80 volts
Grid Pulse Current	40 μ A
Output Pulse Duration	10 μ s
Ambient Temperature Range	-55 to + 85 °C
Anode Delay Time	4.0 μ s
Anode Delay Time Variation	0.4 μ s
Pulse Repetition Rate	20 ppm

Typical Operation (For circuit below)

Anode Supply Voltage	550 volts
Grid Voltage	0 volts
Glow Current	50 μ A



* May be triggered manually by applying d-c momentarily to grid.

Minimum Conditions

Anode Operating Voltage, d-c	500 volts
Cathode Current Peak	10 amp
Glow Current	30 μ A
Grid Resistor	0.25 meg
Grid Pulse Duration	10 μ s
Grid Pulse Amplitude	230 volts