



E-287B 7-22-58

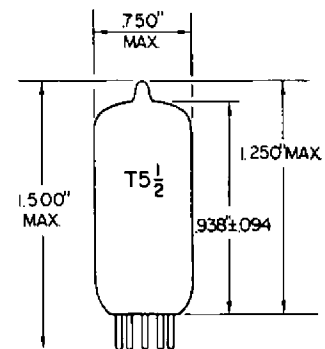
technical information

CBS-HYTRON*A Division of Columbia Broadcasting System, Inc.
Danvers, Massachusetts***7229****Cold-Cathode Trigger Tube**

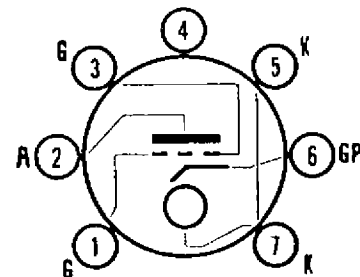
The 7229 is a cold-cathode miniature trigger and timer tube used in trigger applications where high hold-off voltage, short anode delay times, minimum anode delay variation and high pulse currents are required. Special construction enables the 7229 to operate over an ambient temperature range of -55°C to $+85^{\circ}\text{C}$, and withstand vibrational stresses. Dark-start design characteristic, is such that it 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, JETEC 5-1	T5 1/2
Base, min. button 7-pin	(E7-1)
Mounting position	Any
Maximum overall height	1.5 inch
Maximum diameter	0.75 inch

**PIN CONNECTIONS**

- Pin 1. Grid
- Pin 2. Anode
- Pin 3. Grid
- Pin 4. No connection
- Pin 5. Cathode
- Pin 6. Glow pin
- Pin 7. Cathode



ELECTRICAL DATA

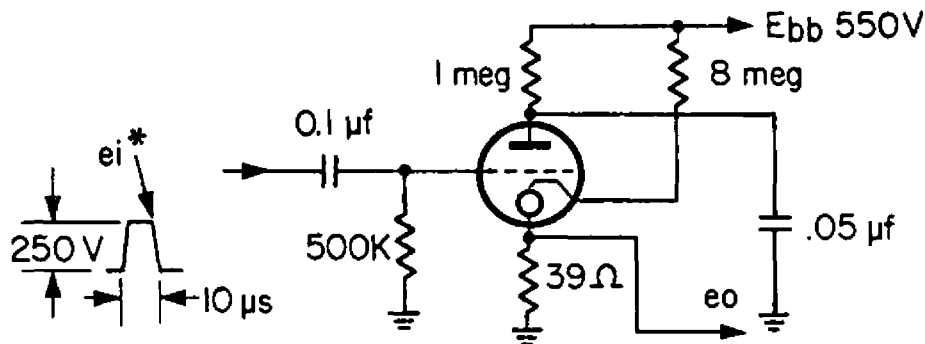
Maximum Ratings (Absolute Maximum Values)

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
Potting temperature (not to exceed 2 hours)	125° C

**Pulse repetition rate is governed by the relation $W = 1/2 CV^2f$, where C = discharge capacitor; V = anode potential in kilovolts; W = power input, and f = repetition frequency.

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