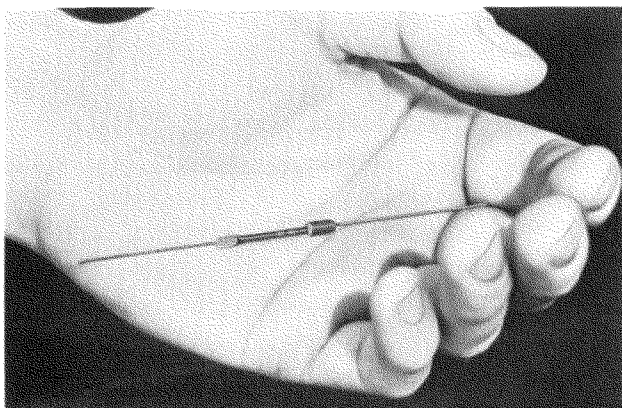


GAS DIODE VOLTAGE REGULATOR



DESCRIPTION

This tube is a sub-miniature voltage regulator of the cold cathode type. It is designed for use as a voltage reference source or a voltage stabilizing element in low current applications where space conservation is a primary consideration. Its small size and wire lead terminals permit it to be incorporated directly into the electrical circuit in the same manner as small condensers or resistors, thereby eliminating the need for any tube socket.

RATINGS

Anode supply voltage.....	300 volts DC
Ionization voltage*	250 volts DC (max.)
Regulation voltage**	150 volt DC
Operating current range.....	75 to 400 microamps.
Regulation over current range.....	$\pm 5\%$
Ambient temperature range.....	$-55^{\circ}\text{C. to } +85^{\circ}\text{C.}$
Regulation over ambient range***	$\pm 5\%$

*With anode circuit resistances adjusted to give anode current of 250 microamperes.

**With anode circuit resistance adjusted to give anode current of 250 microamperes as center value at room temperature.

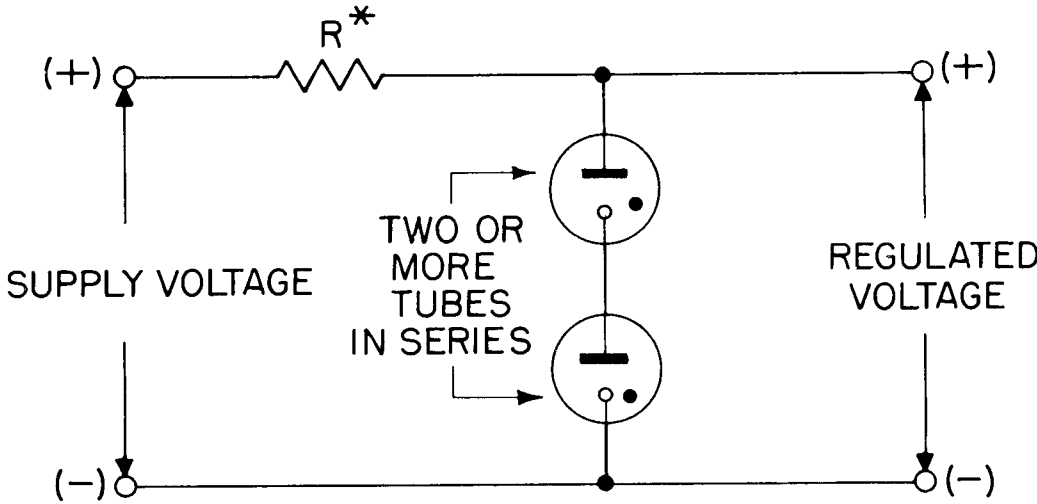
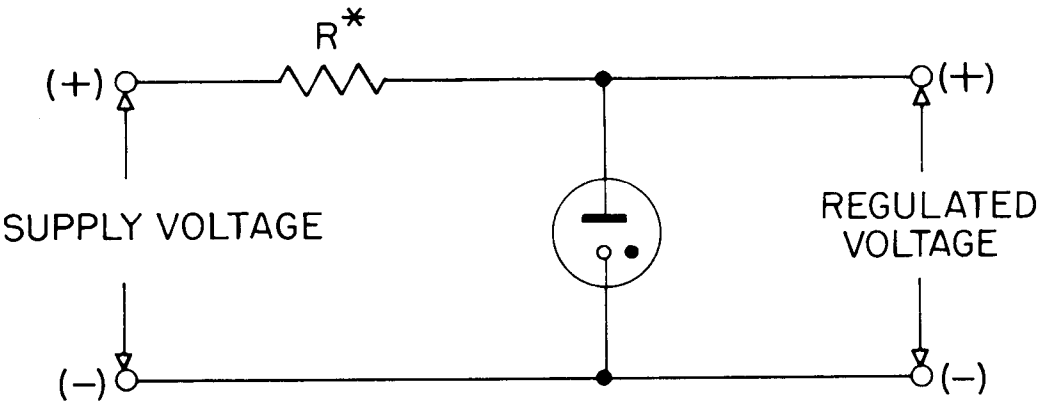
***With anode circuit resistance adjusted to give anode current of 250 microamperes at room temperature.

PHYSICAL CHARACTERISTICS

Connections	Tinned wire leads
Maximum diameter.....	0.150-in. (max.)
Length — without leads	1.187-in. (max.)
Mounting position.....	Any
Lead length	1.25-in.

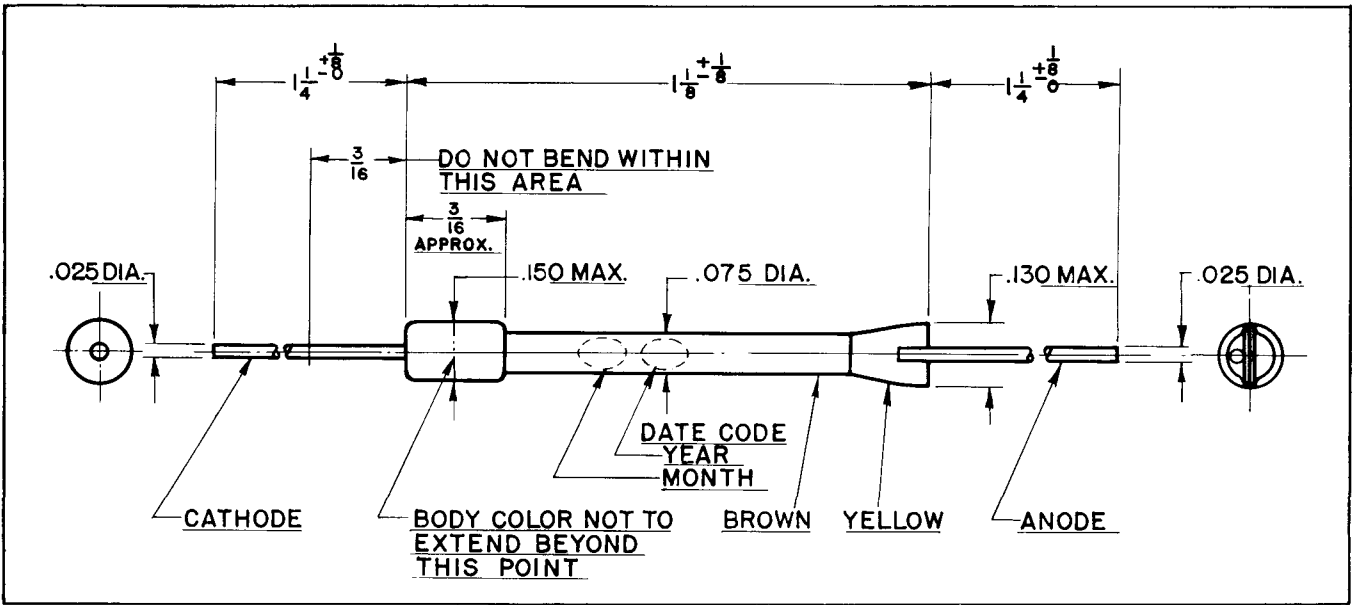
OPERATION NOTES

Sufficient resistance must be inserted in series with the tube to limit the current passing through the tube to 400 microamperes (steady state). Maximum starting or surge current should be limited to one milliampere. Tube regulating characteristics will be impaired by excessive current during starting or by current surges. High circuit capacity across the tube may cause the tube to oscillate leading to unstable operation with consequent poor or erratic regulation characteristics.



* SEE OPERATION NOTES

CIRCUIT APPLICATIONS



OUTLINE DRAWING