



# ENGINEERING BULLETIN

## ELECTRONIC COMPONENTS

from JEDEC release #3140,  
Feb. 13, 1961

### N. U. 7234

### High Voltage Pentode

The N.U. 7234 is designed for use in circuits employing the characteristics of a pentode with operating anode voltages between 3 and 8 KV. It is especially useful as a control or regulator tube where equipment requires stabilized output voltage in the kilovolt range. Low capacities, high gain and high voltage ratings permit this pentode to be of considerable usage in high voltage sweep circuits. This tube extends the pentode region beyond the limits of its companion tube, the N.U. 6842, which operates over the 1 to 4 KV anode volt range.

#### ELECTRICAL CHARACTERISTICS

Transconductance	3800
$E_b$ 1500 $E_{c2}$ 150 $E_{c1}$ -1	
Plate Resistance	1 meg
$E_b$ 1500 $E_{c2}$ 150 $E_{c1}$ -1	
Anode Voltage	Max 8000
Anode Dissipation Watts	Max 10
Anode Current Average	Max 5 ma
Screen Dissipation Watts	Max .5
Screen Current	Max 2 ma

#### Heater Characteristics:

Heater Voltage	6.3
Heater Current	.150
Heater Cathode Voltage	Max $\pm$ 300

#### Capacitance:

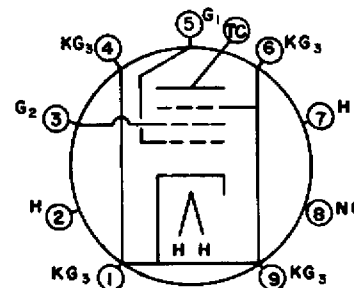
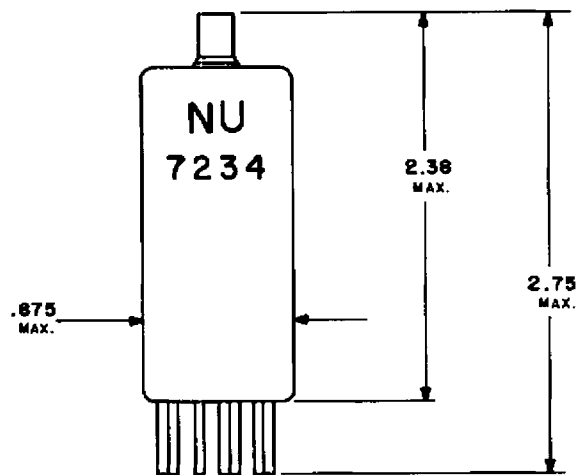
Grid to Plate	.0159 uuf
Cin	4.06 uuf
Cout	2.23 uuf

#### BASE CONNECTIONS:

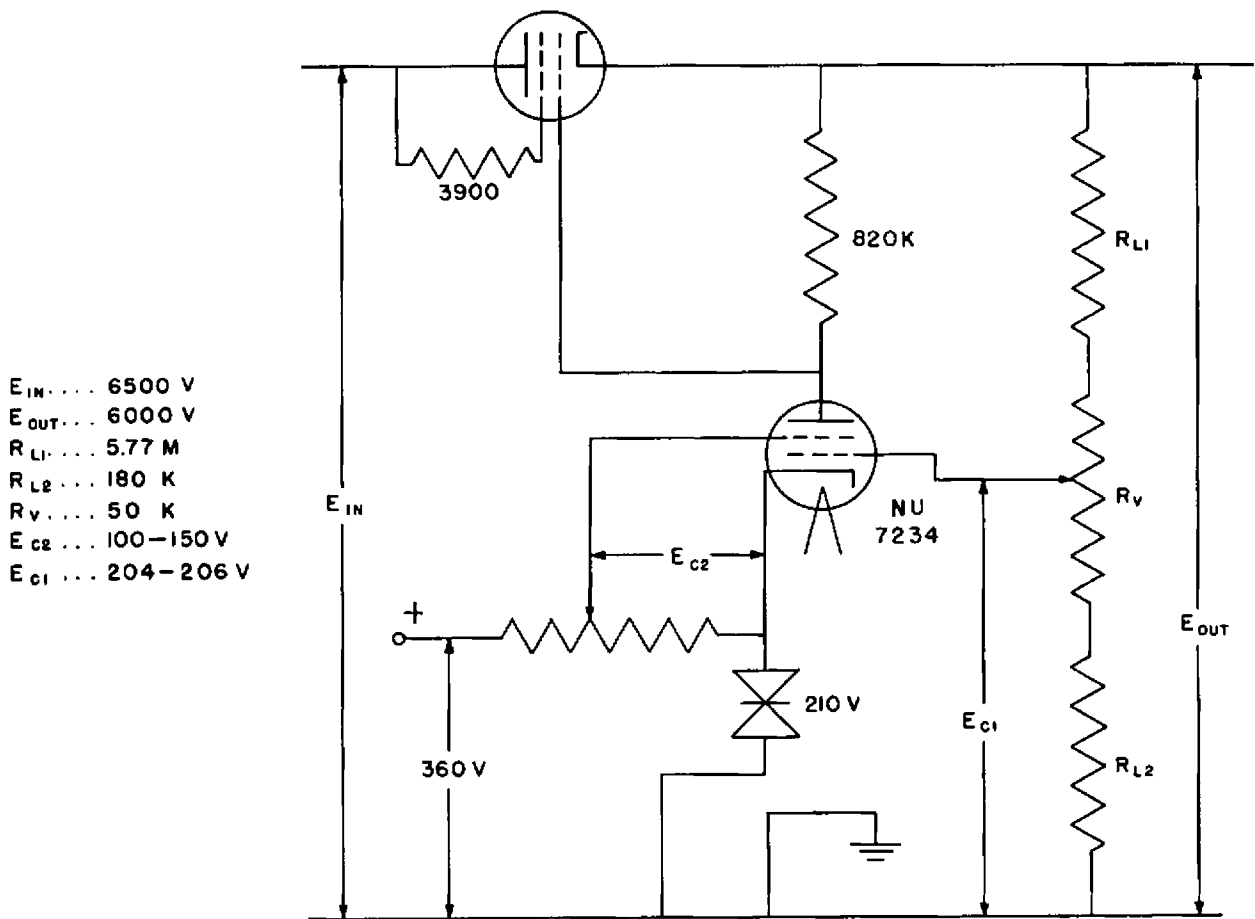
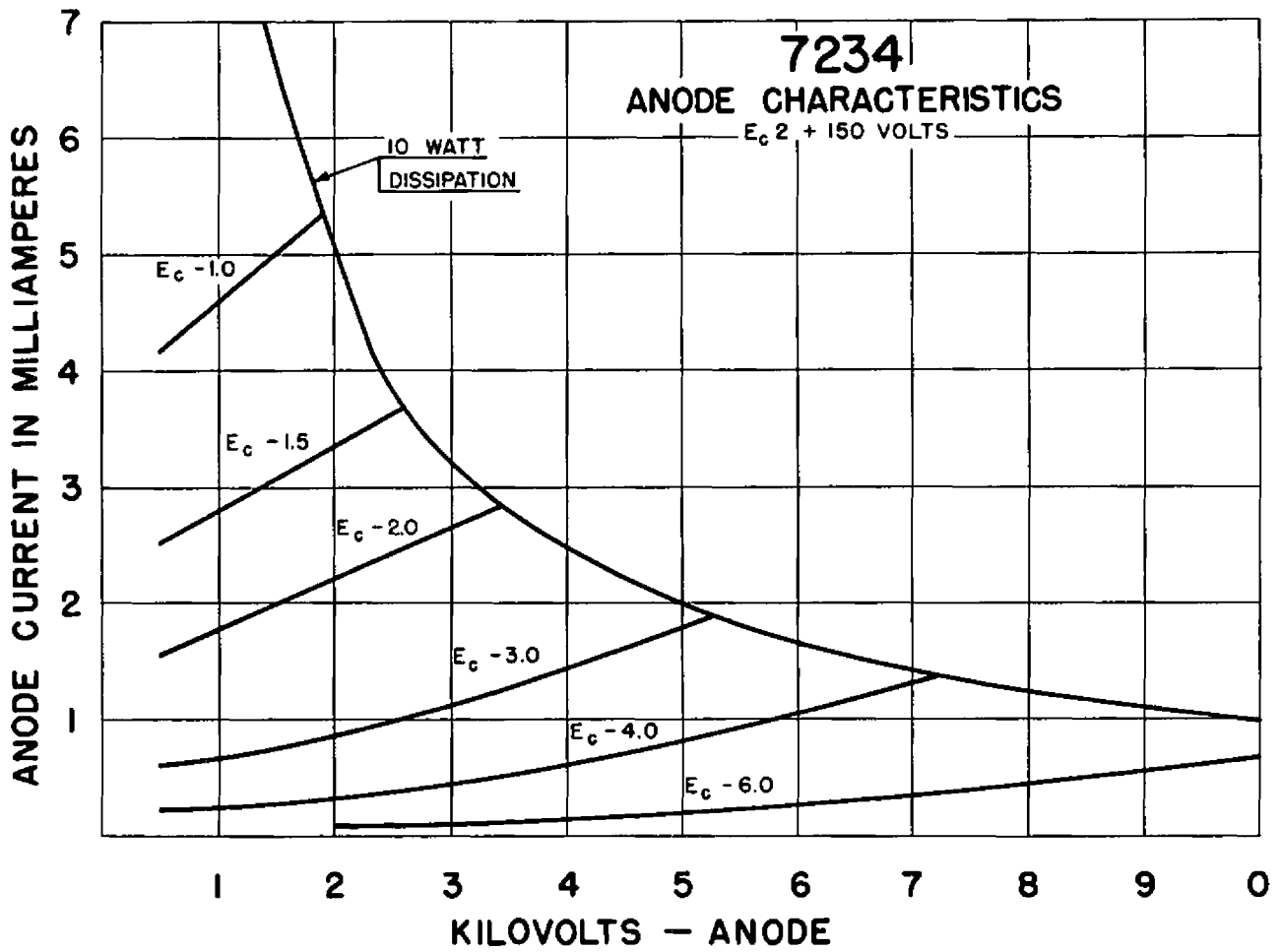
1 Cathode grid 3	6 Cathode grid 3
2 Heater	7 Heater
3 Grid 2	8 NC
4 Cathode grid 3	9 Cathode grid 3
5 Grid	Top Cap Anode

#### PHYSICAL CHARACTERISTICS

Bulb	T-6 $\frac{1}{2}$
Top Cap	C1-3
Basing	9KD
Mounting Position	Any



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$E_{IN} \dots 6500 \text{ V}$   
 $E_{OUT} \dots 6000 \text{ V}$   
 $R_{L1} \dots 5.77 \text{ M}$   
 $R_{L2} \dots 180 \text{ K}$   
 $R_v \dots 50 \text{ K}$   
 $E_{c2} \dots 100-150 \text{ V}$   
 $E_{c1} \dots 204-206 \text{ V}$

TYPICAL SIMPLIFIED VOLTAGE REGULATOR