DESCRIPTION

The 418A electron tube is an indirectly heated cathode type tetrode. This tube was designed primarily for use as a power output tube in broad-band video and intermediate-frequency amplifiers.

CHARACTERISTICS

Heater Voltage .................................................. 6.3 volts
Cathode Current .................................................. 70 milliamperes
Transconductance ................................................. 26500 micromhos

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GENERAL CHARACTERISTICS

ELECTRICAL DATA

Heater Voltage ........................................ 6.3 volts
Heater Current ....................................... 0.6 amperes
Direct Interelectrode Capacitances
 Without External Shield
 Grid to Plate ........................................ 0.055 μf
 Input: gl to (h+k+g2+i.s) .......................... 15.0 μf
 Output: p to (h+k+g2+i.s) ......................... 2.8 μf

MECHANICAL DATA

Cathode ................................................. Coated Unipotential
Bulb .................................................... T9
Base ..................................................... See outline drawing page 4
Mounting Position .................................... Any
Dimensions and pin connections shown in outline drawing on page 4

MAXIMUM RATINGs, Design Center Values

Plate Voltage ......................................... 250 volts
Screen Grid Voltage .................................. 150 volts
Plate Dissipation ..................................... 8.5 watts
Screen Grid Dissipation .............................. 3.0 watts
Control Grid Dissipation ........................... see footnote *
Cathode Current ...................................... 90 milliamperes
Heater-Cathode Voltage ............................. 90 volts
Bulb Temperature ..................................... 130 centigrade

MAXIMUM CIRCUIT VALUES

Grid Circuit Resistance:
   For Fixed Bias ..................................... 0.05 megalohm
   For Cathode Bias ................................... 0.10 megalohm

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

Plate Voltage .......................................... 120 150 volts
Screen Grid Voltage .................................. 120 150 volts
Control Grid Voltage ................................-1.0 --- volts
Cathode Bias Resistor ................................ 47 27 ohms
Plate Current ......................................... 47 50 milliamperes
Screen Grid Current .................................. 20 20 milliamperes
Plate Resistance ...................................... 18000 18000 ohms
Transconductance ..................................... 26500 26500 micromhos
Control Grid Voltage (approximate) for
   Plate Current of 10 microamperes .............. -9.5 --- volts

* Operation with the control grid positive with respect to the cathode is not recommended.
A development of Bell Telephone Laboratories, the research laboratories of the American Telephone and Telegraph Company and the Western Electric Company.