
ELECTRON TUBE DATA SHEET
WESTERN ELECTRIC 418A ELECTRON TUBE



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

($E_b = E_{c2} = 150$ volts)
($E_{c1} = 0$ $R_k = 27$ ohms)

File: General Purpose Section
Issue 2, 4-56

418A

GENERAL CHARACTERISTICSELECTRICAL DATA

Heater Voltage	6.3 volts
Heater Current	0.6 ampere
Direct Interelectrode Capacitances	Without External <u>Shield</u>
Grid to Plate	0.055 μ mf
Input: g1 to (h+k+g2+i.s)	15.0 μ mf
Output: p to (h+k+g2+i.s)	2.8 μ mf

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

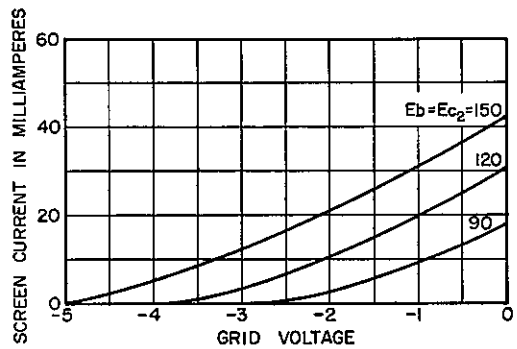
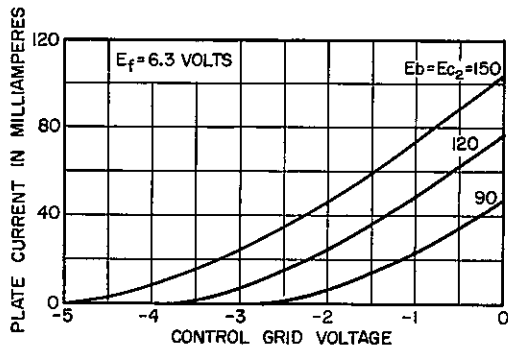
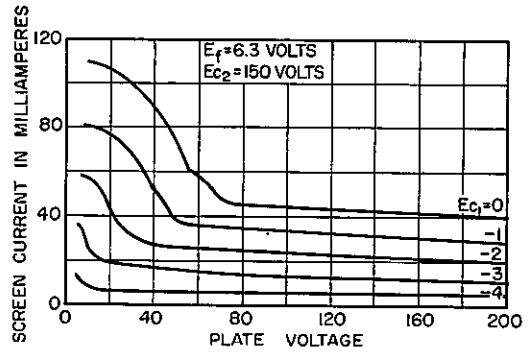
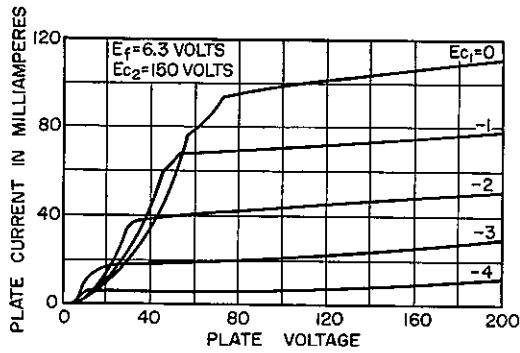
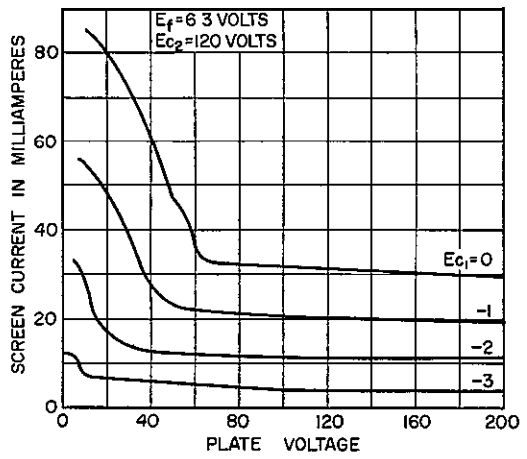
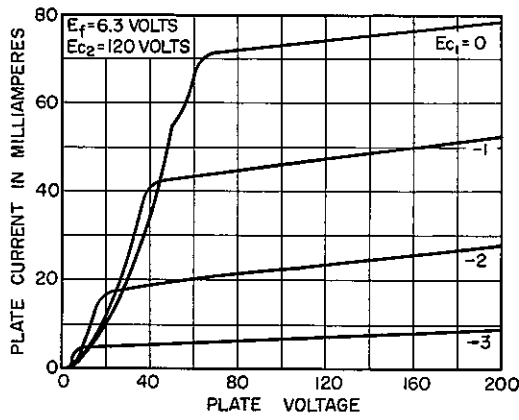
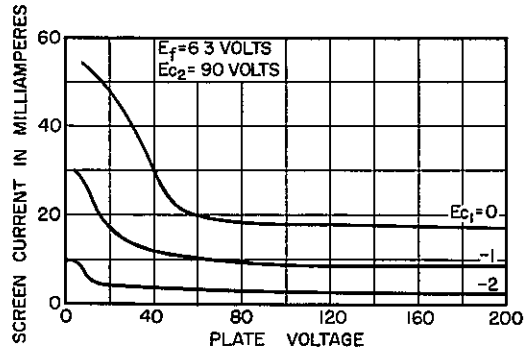
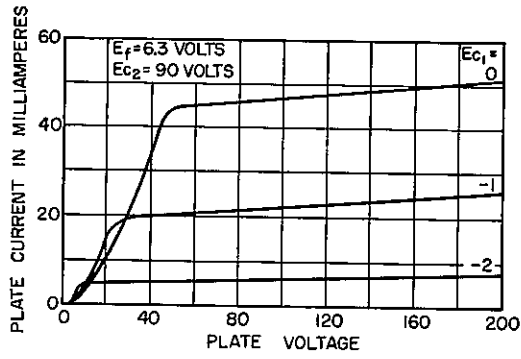
MAXIMUM CIRCUIT VALUES

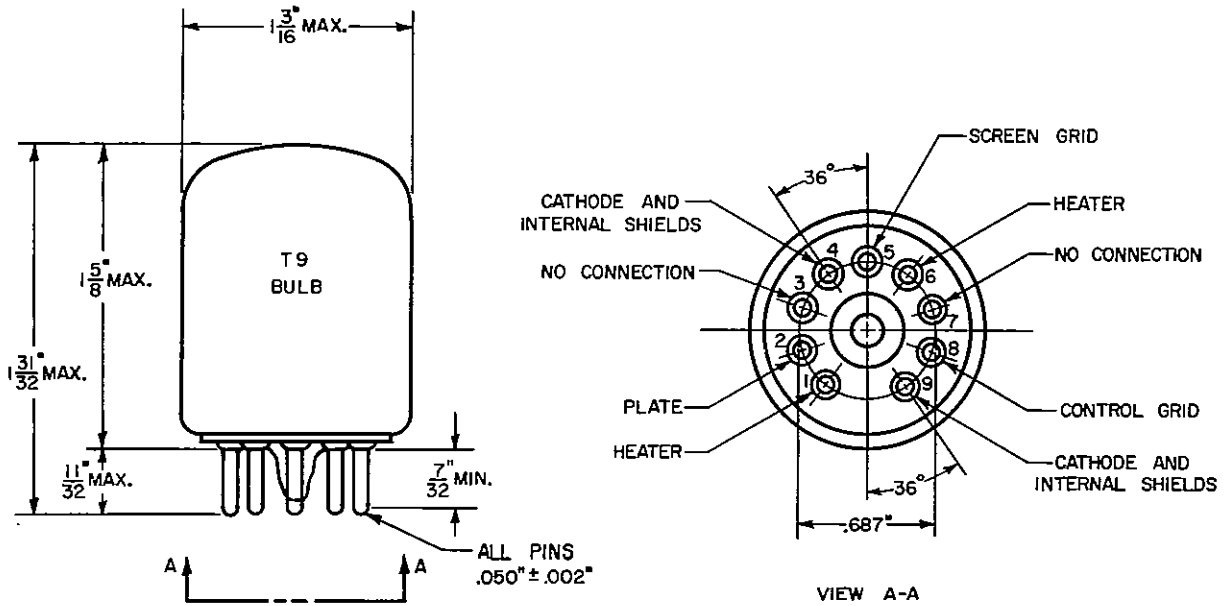
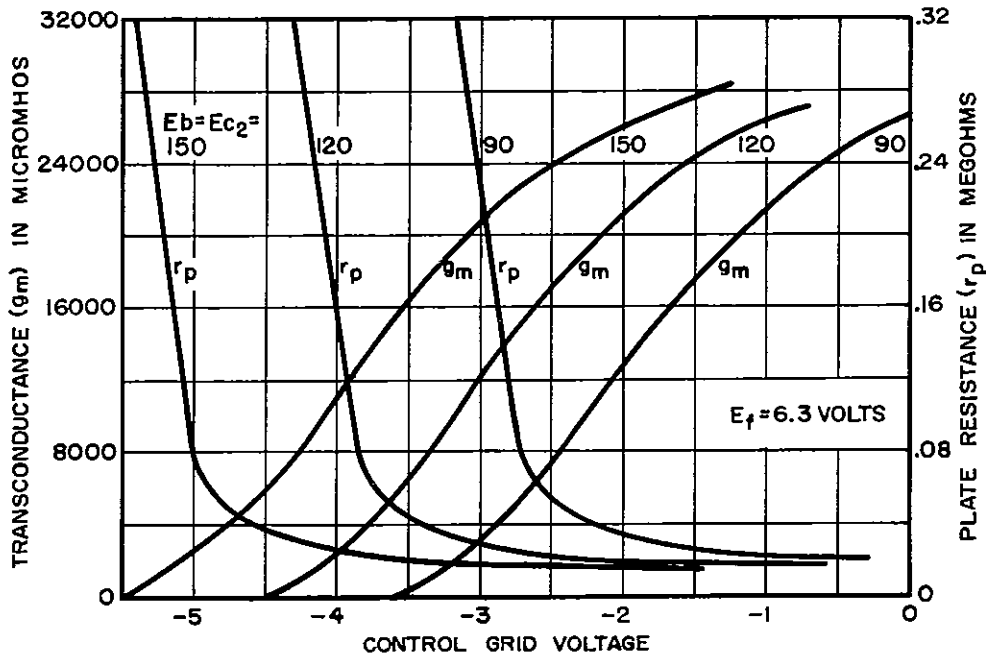
Grid Circuit Resistance:	
For Fixed Bias	0.05 megohm
For Cathode Bias	0.10 megohm

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	---	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.