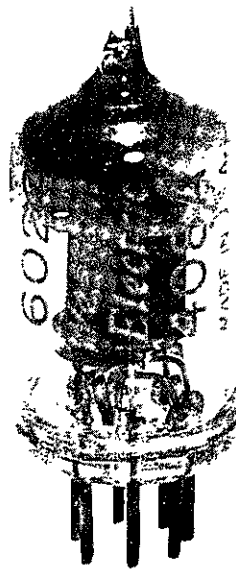

ELECTRON TUBE DATA SHEET
WESTERN ELECTRIC 408A* ELECTRON TUBE



DESCRIPTION

The 6028/408A* is a 7-pin miniature pentode having an indirectly heated cathode. It is designed for use in amplifier circuits at high and ultra high frequencies. It is also suitable for audio-frequency applications where exceptionally low microphonic noise is not a requirement.

CHARACTERISTICS

Heater Voltage	20 volts
Plate Current	7.5 milliamperes
Transconductance	5000 micromhos

} $E_b = E_{c2} = 120$ volts;
Cathode-Bias Resistor = 200 ohms

GENERAL CHARACTERISTICSELECTRICAL DATA

Heater Voltage, A-C or D-C		20 volts
Heater Current		50 milliamperes
Direct Interelectrode Capacitances . . .	without external shield	with external shield (RMA # 316)
Grid to Plate (maximum)019	*.010 uuf
Input	3.9	*4.0 uuf
Output	2.0	*2.9 uuf

MECHANICAL DATA

Cathode	Coated Unipotential
Bulb	T5 1/2
Base	Miniature Button 7-pin
Mounting Position	any

Dimensions and pin connections shown in outline drawing on Page 5

MAXIMUM RATINGS, Design-Center Values

Plate Voltage	180 volts
Screen Grid Voltage	140 volts
Plate Dissipation	1.7 watts
Screen Grid Dissipation	0.5 watt
Cathode Current	18 milliamperes
Heater-Cathode Voltage ¹	120 volts
Bulb Temperature	120°centigrade

Maximum Grid Current Resistance for

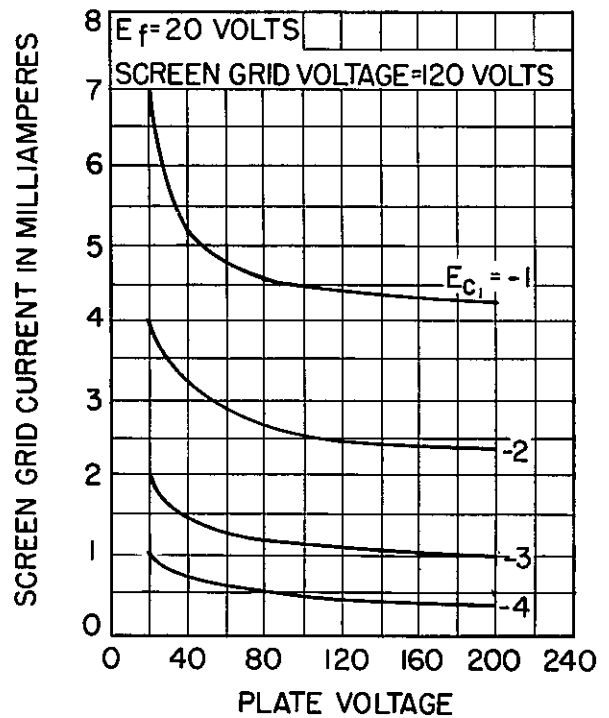
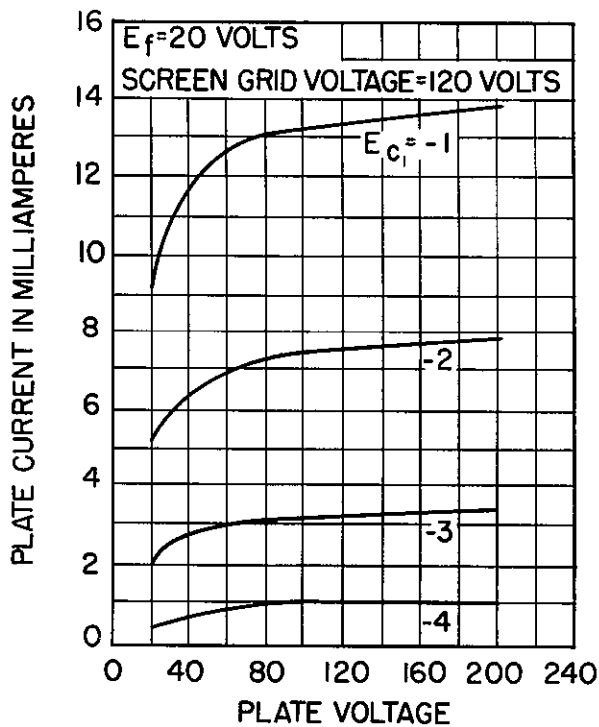
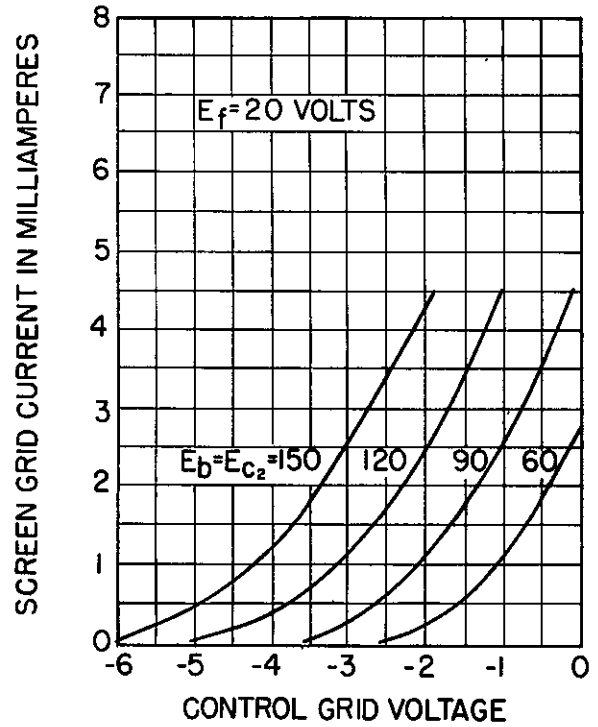
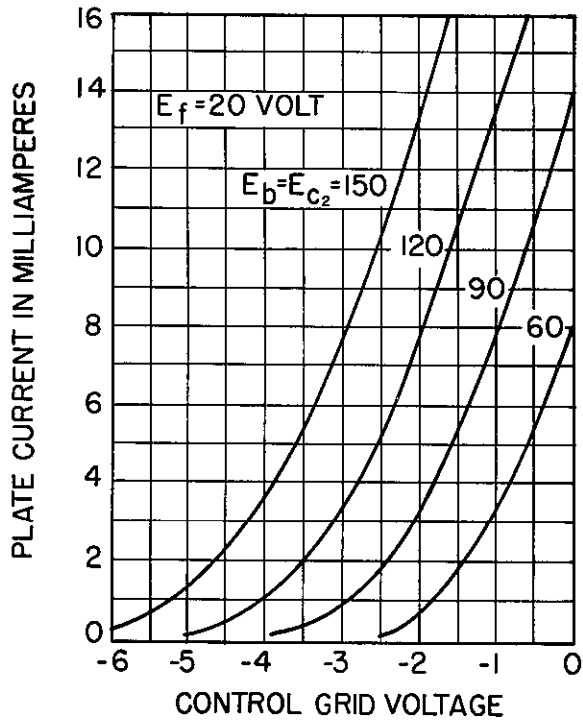
Fixed Bias	1.0 megohm
Cathode Bias	2.0 megohms

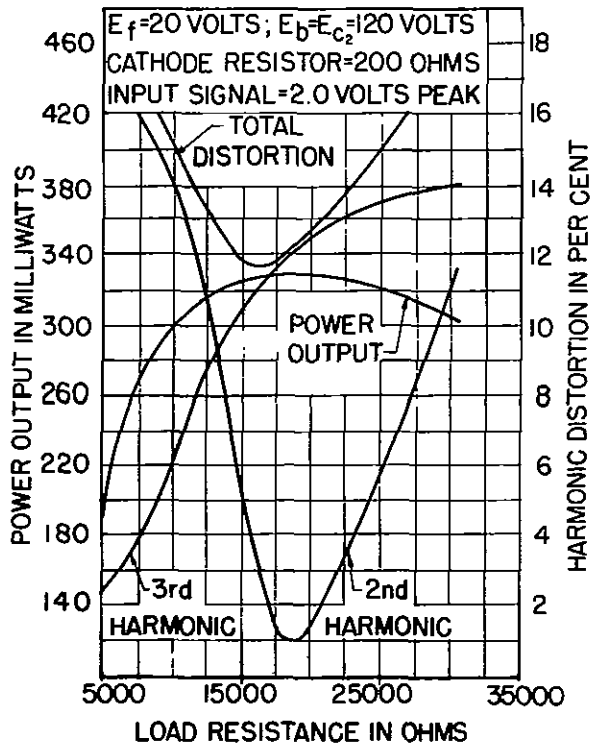
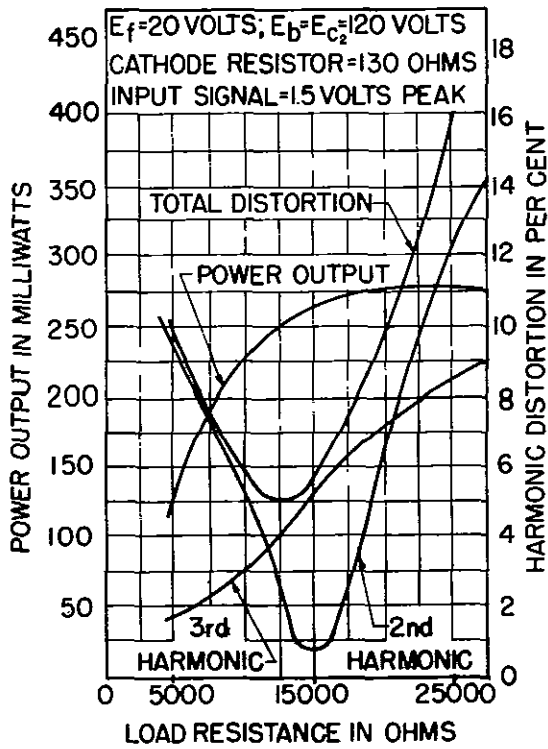
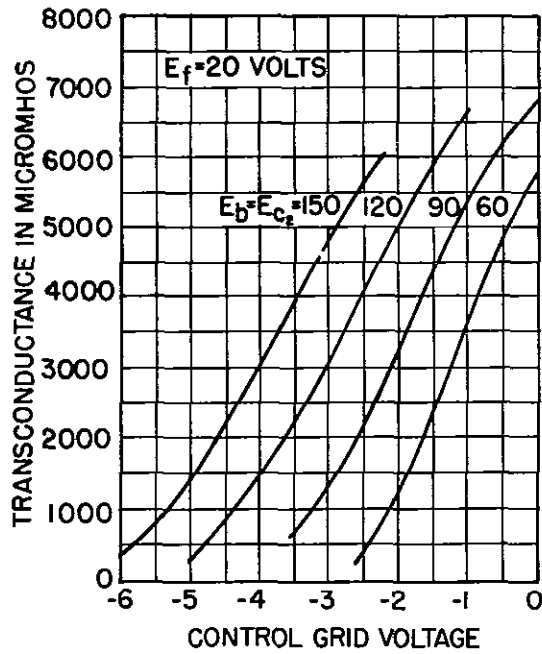
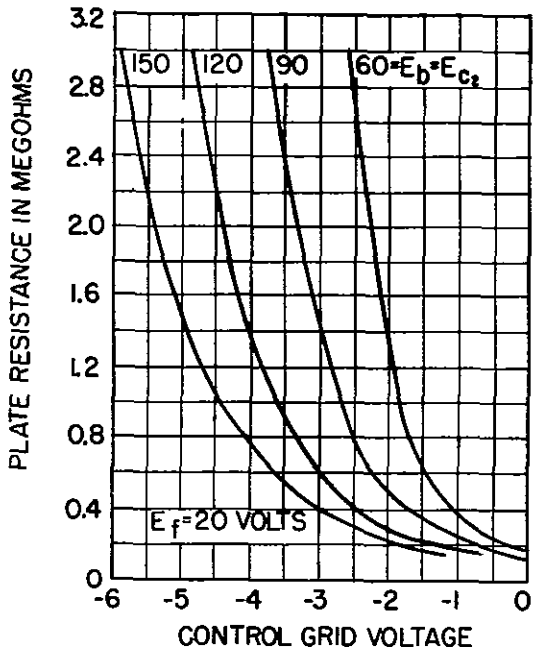
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS - CLASS A₁ AMPLIFIER

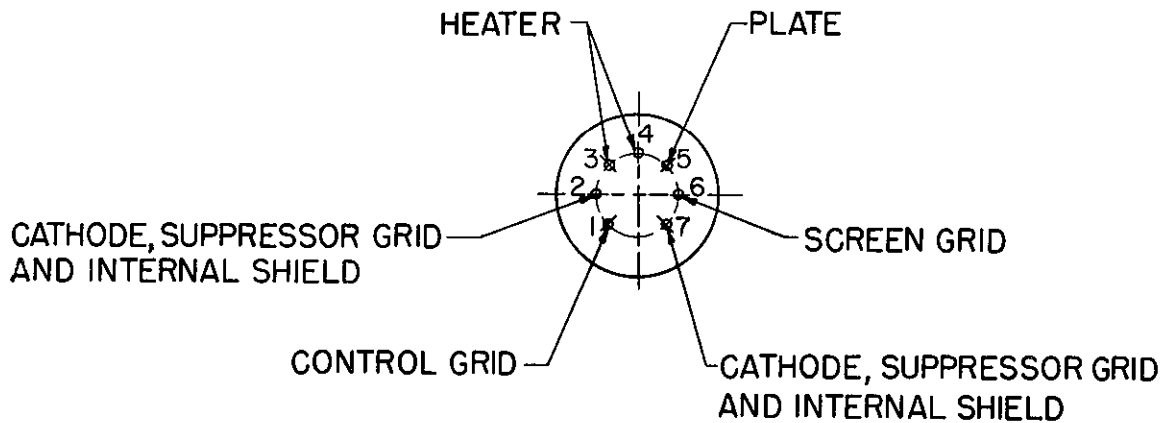
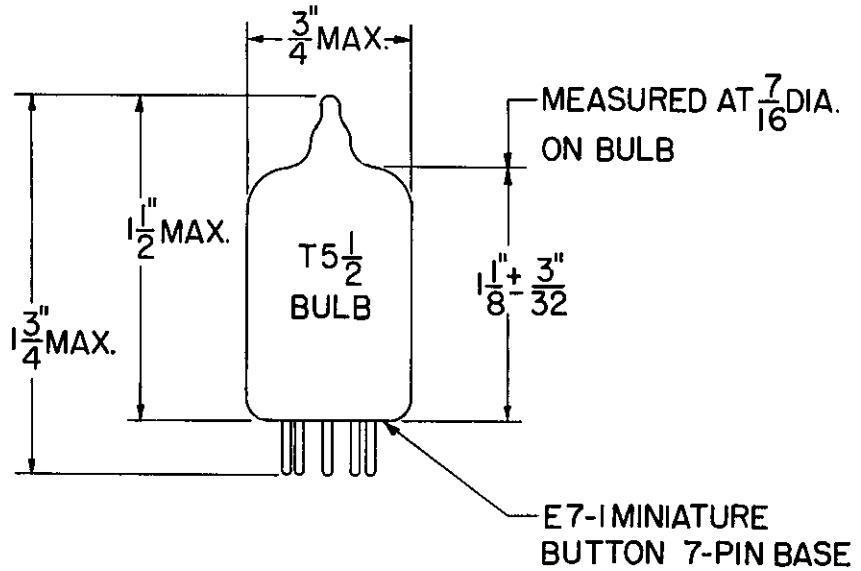
Plate Voltage	120	120 volts
Screen Grid Voltage	120	120 volts
Cathode-Bias Resistor	200	130 ohms
Peak A-F Grid Voltage	2.0	1.5 volts
Zero Signal Plate Current	7.5	9.4 milliamperes
Maximum Signal Plate Current	7.7	9.2 milliamperes
Zero Signal Screen Grid Current	2.5	3.2 milliamperes
Maximum Signal Screen Grid Current	3.3	3.9 milliamperes
Plate Resistance	0.30	0.25 megohm
Transconductance	5000	5600 micromhos
Load Resistance	15000	15000 ohms
Power Output	325	265 milliwatts
Total Harmonic Distortion	12	5.5 per cent
Grid Voltage, Approximate, for Plate Current of 10 Microamperes	-6.8	-6.8 volts

* External shield connected to cathode pins 2 and 7.

Note 1. For optimum tube life it is recommended that heater-cathode voltage should not exceed 90 volts.







A development of Bell Telephone Laboratories, the research laboratories of the American Telephone and Telegraph Company and the Western Electric Company.