

**PENTODE
MINIATURE**

Western Electric

DESCRIPTION

The 6AK5/403A* 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.

CHARACTERISTICS

Heater Voltage	6.3 volts
Plate Current	7.5 milliamperes
Transconductance	5000 micromhos

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

GENERAL CHARACTERISTICS

ELECTRICAL DATA

Heater Voltage, A-C or D-C		6.3 volts
Heater Current		175 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	T5½
Base	Miniature Button 7-pin
Mounting Position	Any

Dimensions and pin connections shown in outline drawing on Page 4

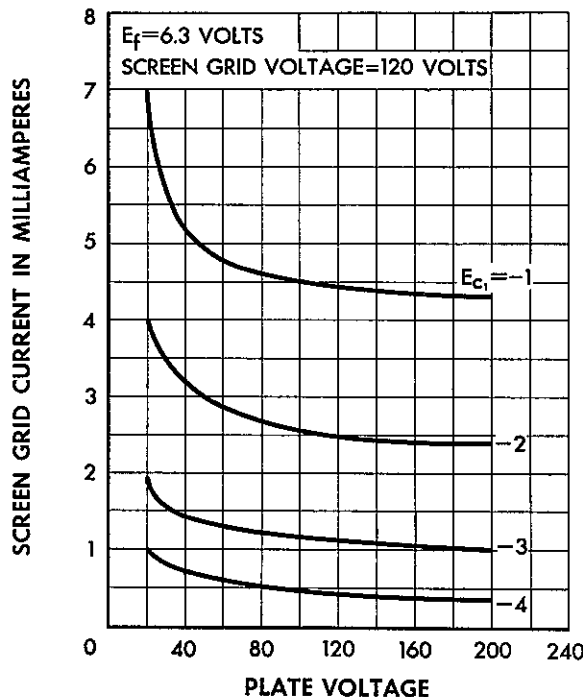
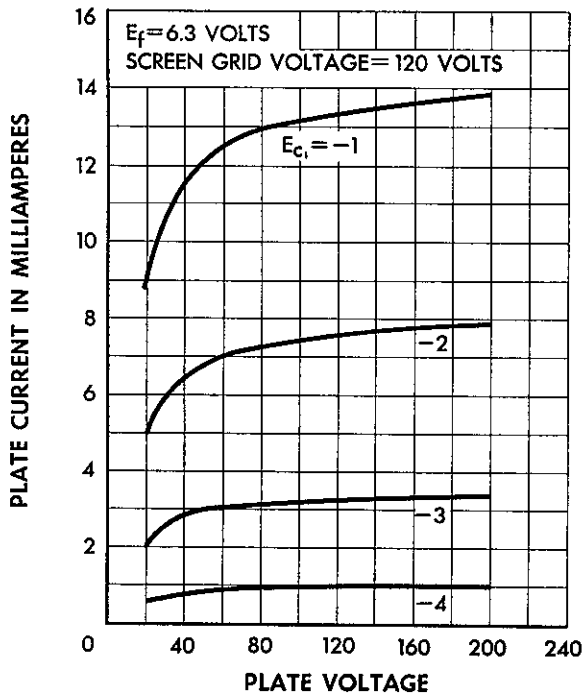
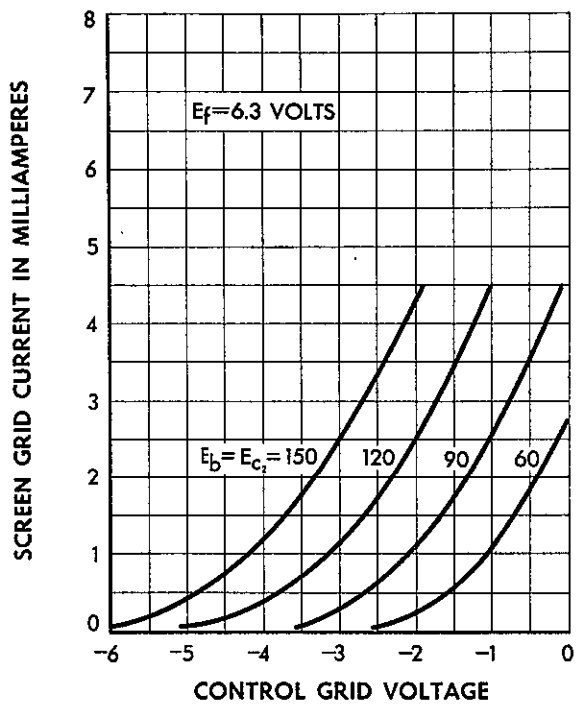
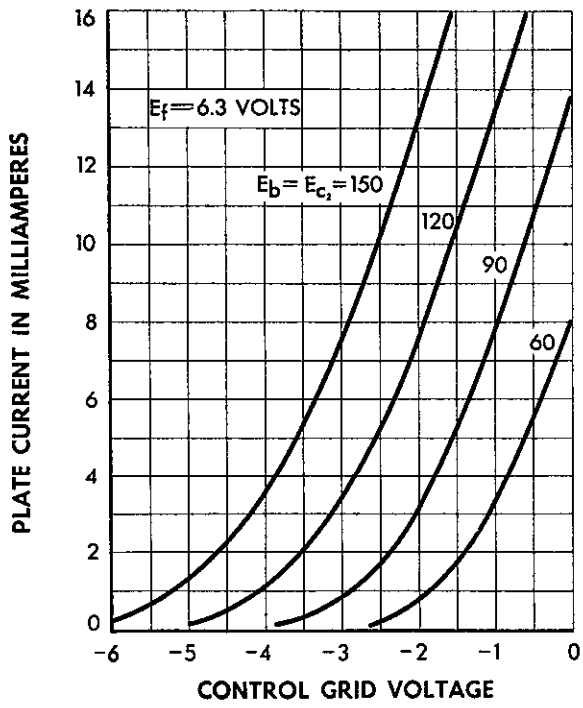
MAXIMUM RATINGS, Design-Center Values

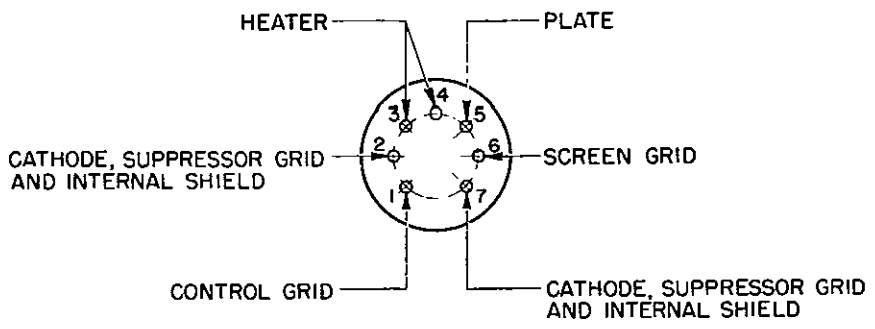
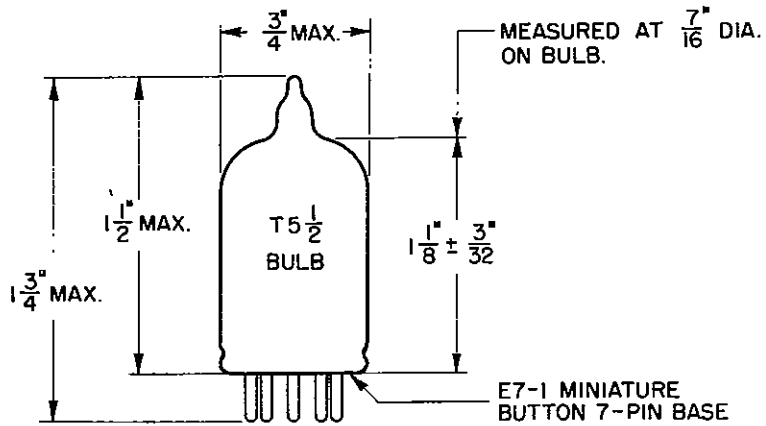
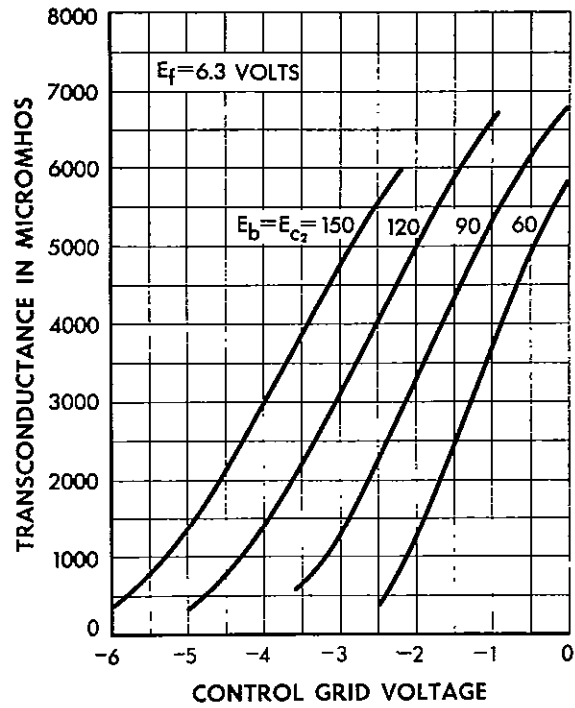
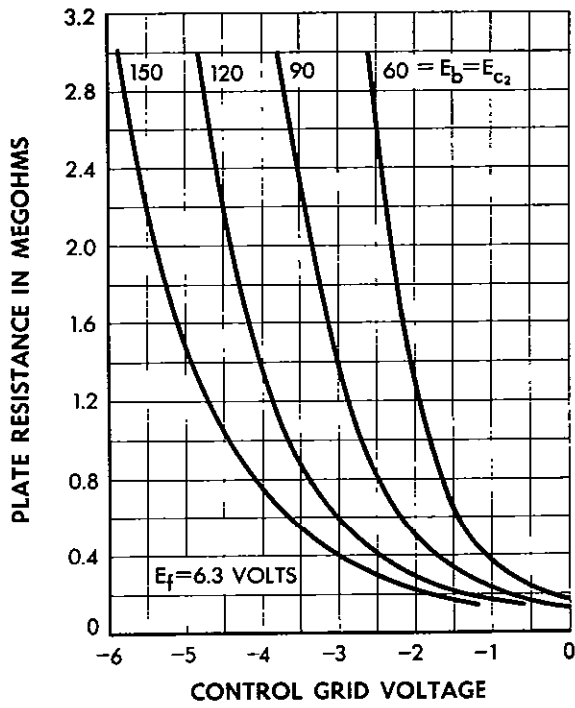
Plate Voltage	180 volts
Screen Grid Voltage	140 volts
Plate Dissipation	1.7 watts
Screen Grid Dissipation	0.5 watt
Cathode Current	18 milliamperes
Heater-Cathode Voltage	90 volts
Bulb Temperature	120 centigrade

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS — CLASS A₁ AMPLIFIER

Plate Voltage	120	150	180 volts
Screen Grid Voltage	120	140	120 volts
Cathode-Bias Resistor	200	330	200 ohms
Plate Current	7.5	6.6	7.7 milliamperes
Screen Grid Current	2.5	2.1	2.4 milliamperes
Plate Resistance	0.30	0.40	0.45 megohm
Transconductance	5000	4500	5100 micromhos
Grid Voltage, Approximate, for Plate Current of 10 Microamperes	-6.8	-7.8	-6.9 volts

*External shield connected to cathode pins 2 and 7.





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