



PENTODE

Western Electric

DESCRIPTION

The 375A is a beam power pentode of the heater cathode type. It is designed for use as an audio-frequency amplifier at plate voltages up to 130 volts. It is particularly suitable for use in communication installations where the available plate supply is only 48 volts.

CHARACTERISTICS

Heater Voltage	$E_b = E_c = 45$ volts;	20 volts
Transconductance	} $E_{c1} = -4$ volts	}	4800 micromhos
Power Output

GENERAL CHARACTERISTICS**ELECTRICAL DATA**

Heater Voltage, A-C or D-C	20.0 volts
Heater Current	320 milliamperes
Direct Interelectrode Capacitances (without external shield)	
Grid to Plate	1.0 uuf
Input	13.5 uuf
Output	8.5 uuf

MECHANICAL DATA

Cathode	Coated Unipotential
Bulb	T11
Base	Medium shell, 6-pin octal
Mounting Position	Any

Dimensions and pin connections shown in outline drawing on Page 6

MAXIMUM RATINGS, Design-Center Values

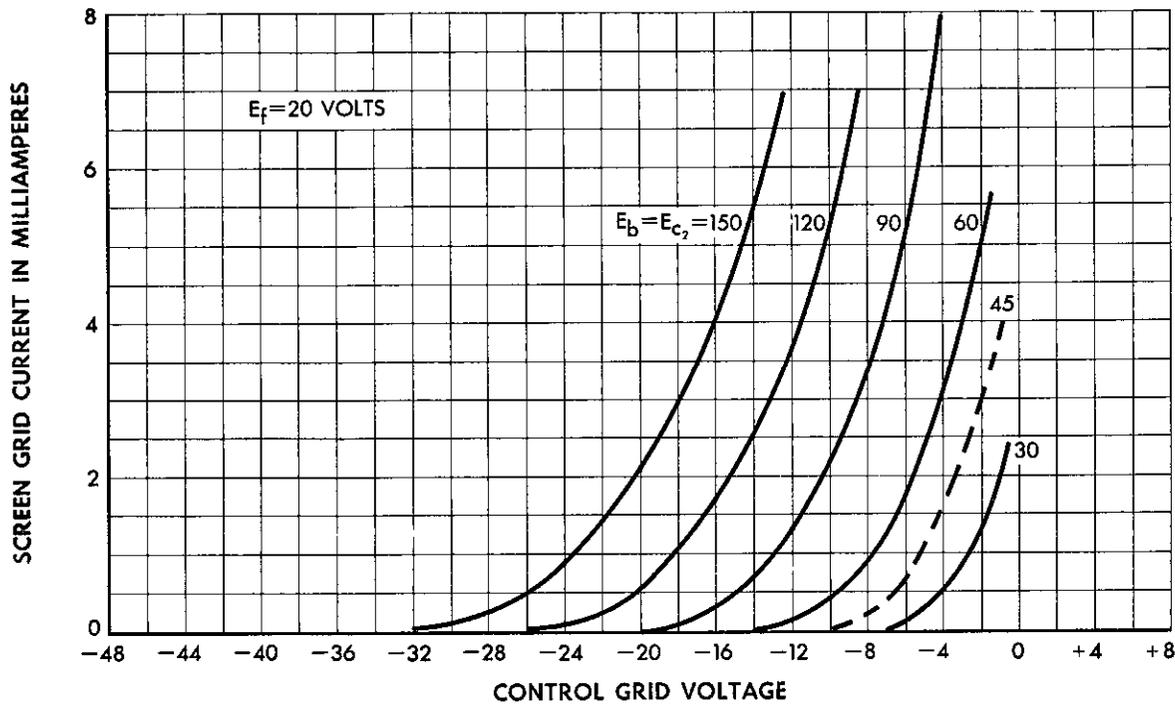
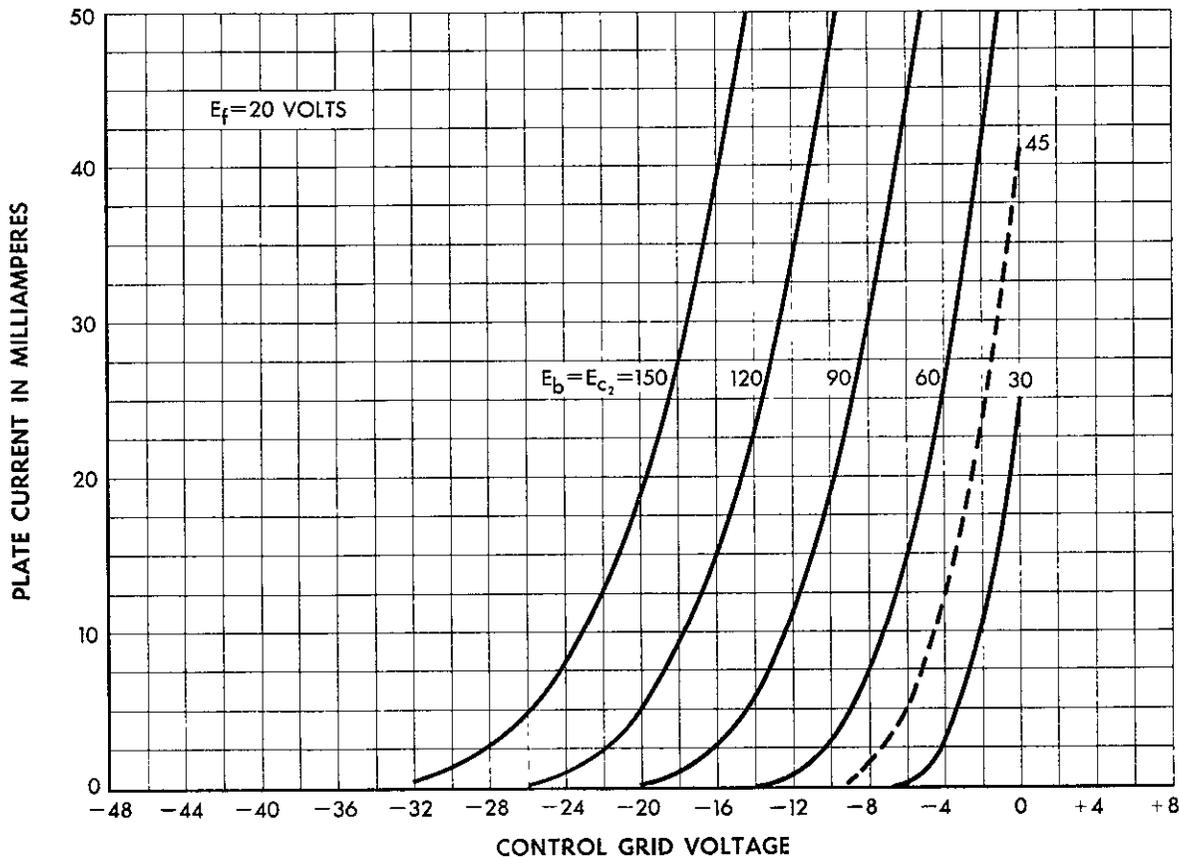
Plate Voltage	130 volts
Screen Grid Voltage	130 volts
Maximum Signal Plate Current	50 milliamperes
Plate Dissipation	6 watts
Screen Grid Dissipation	1.3 watts

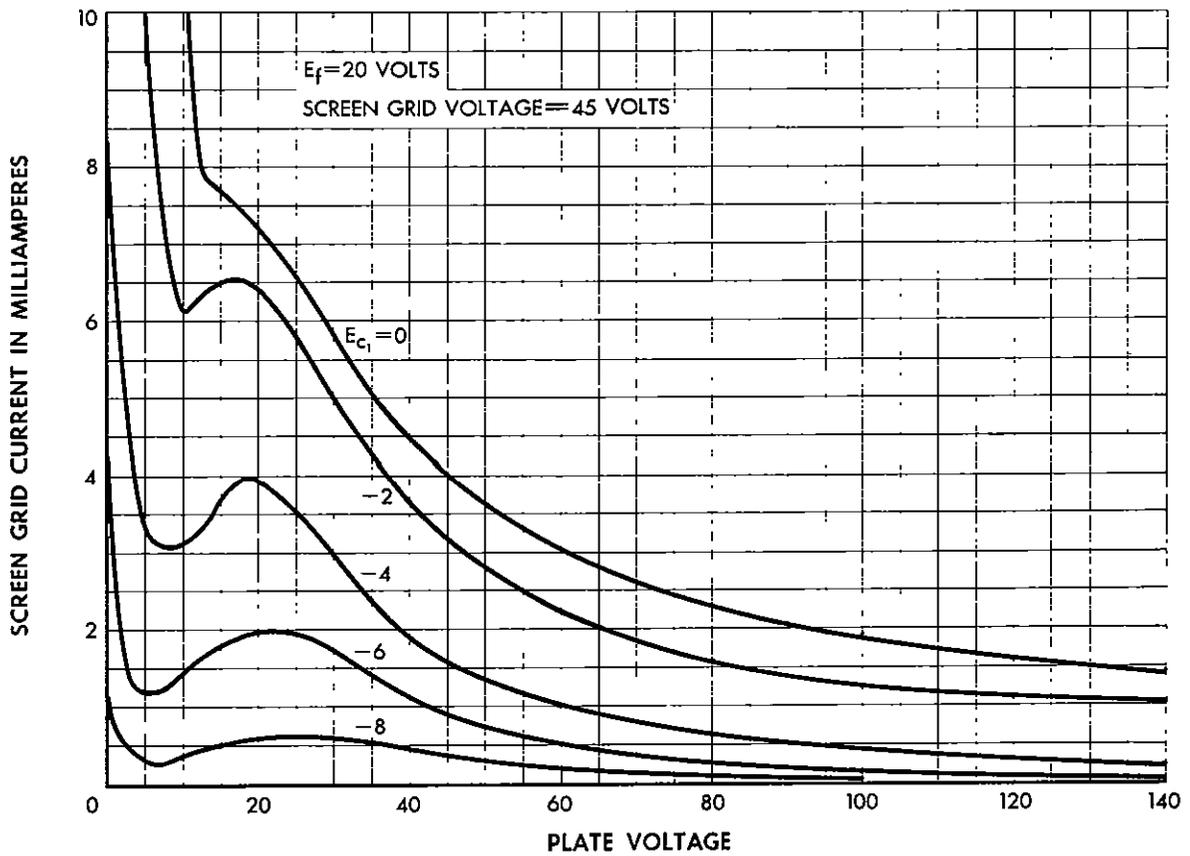
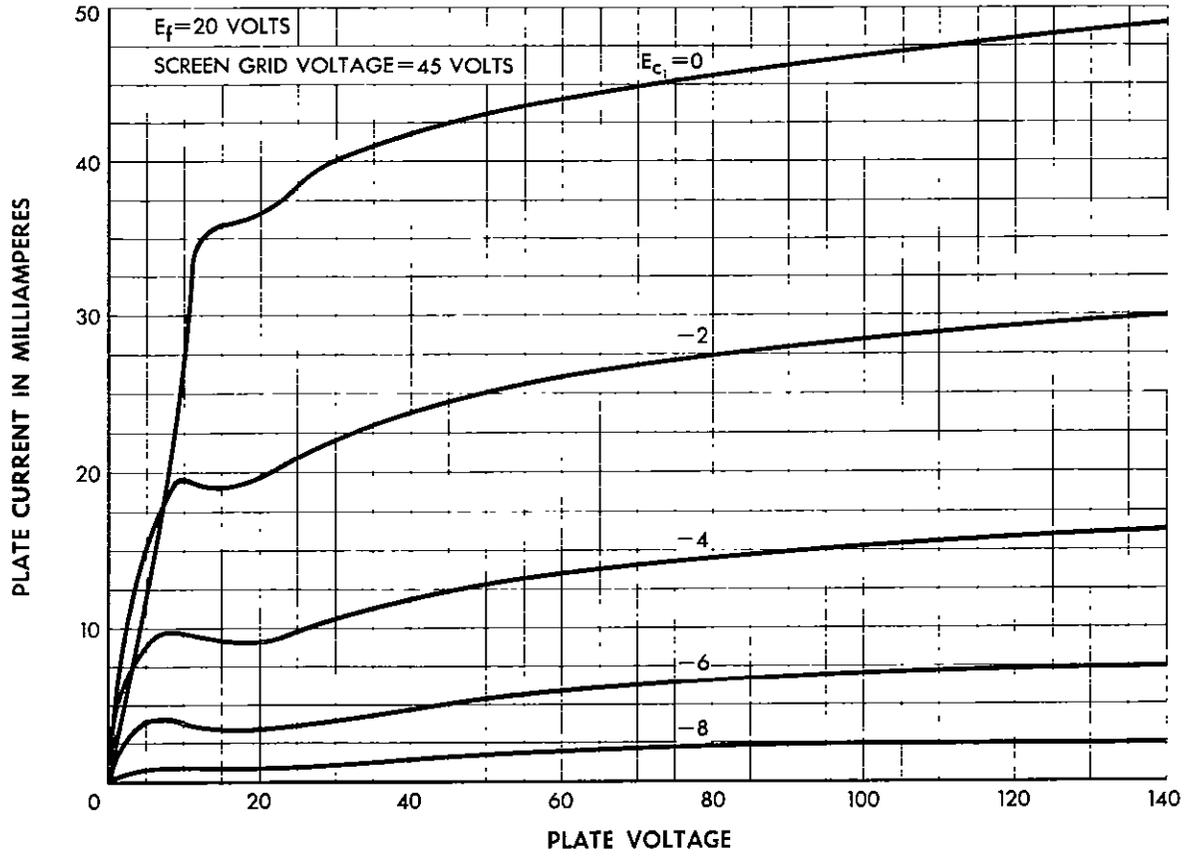
Maximum Grid Circuit Resistance for

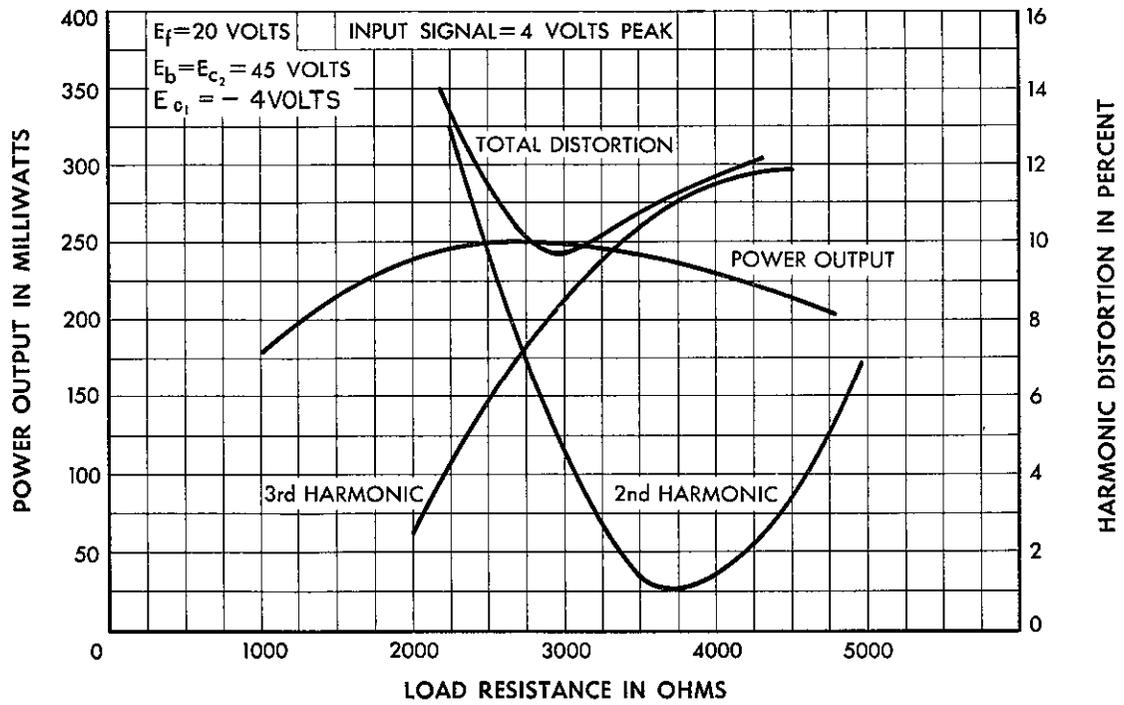
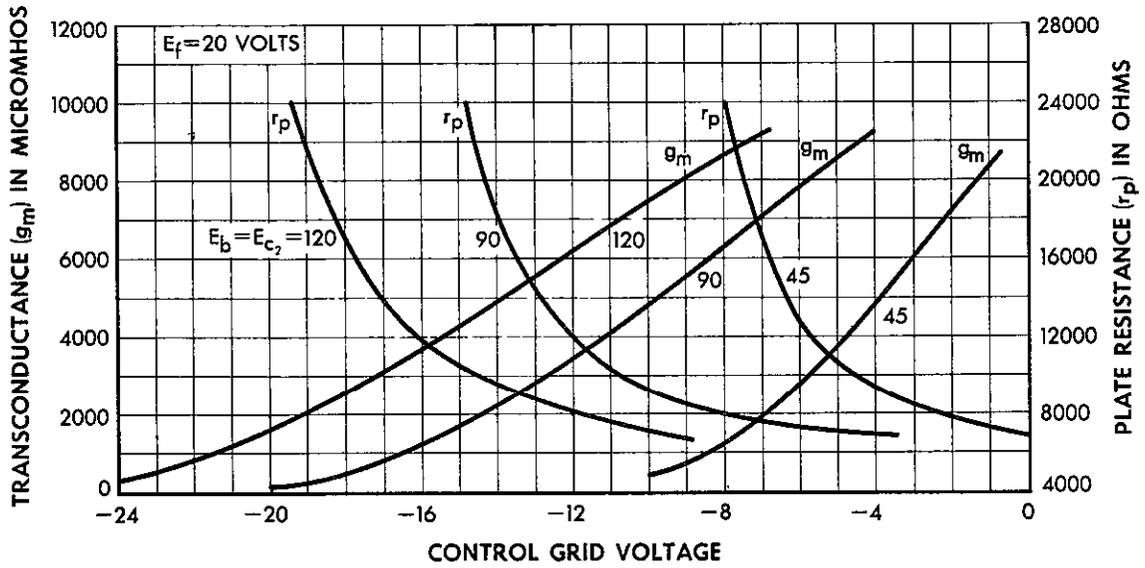
Fixed Bias	0.1 megohm
Cathode Bias	0.5 megohm

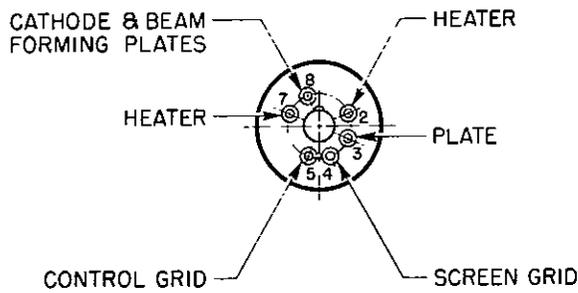
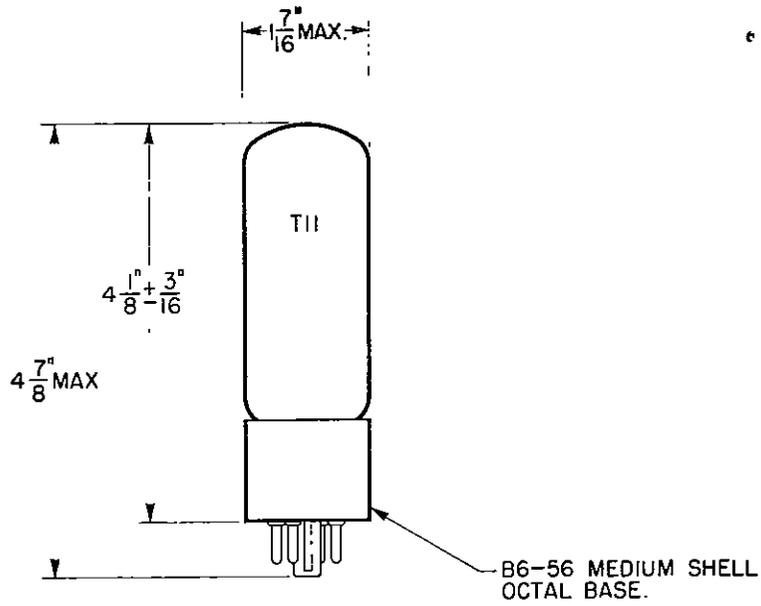
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

Plate Voltage	45	90	120 volts
Screen Grid Voltage	45	90	120 volts
Control Grid Voltage	-4	-7.5	-12 volts
Peak A-F Grid Voltage	4	7.5	12 volts
Zero Signal Plate Current	12.5	33	34 milliamperes
Maximum Signal Plate Current	13.8	34	37 milliamperes
Zero Signal Screen Grid Current	1.5	3.7	3.7 milliamperes
Maximum Signal Screen Grid Current	4.0	11.7	19.0 milliamperes
Transconductance	4800	6600	6200 micromhos
Plate Resistance	9300	7800	8000 ohms
Load Resistance	2800	2500	2500 ohms
Maximum Signal Power Output	0.25	1.4	2.5 watts
Total Harmonic Distortion	10	8	14 per cent









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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.