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ELECTRON TUBE DATA SHEET  
WESTERN ELECTRIC 337A ELECTRON TUBE



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DESCRIPTION

The 337A is a variable-mu pentode of the unipotential cathode type. The suppressor grid is connected to a separate base pin to provide flexibility in usage. This tube is designed for use as an audio, carrier or radio-frequency amplifier, oscillator or modulator.

CHARACTERISTICS

Heater Voltage . . . . .	10 volts
Plate Current . . . . .	6.3 milliamperes
Transconductance . . . . .	1740 micromhos

$\left\{ \begin{array}{l} E_b = 180 \text{ volts;} \\ E_{c2} = 135 \text{ volts;} \\ E_{c1} = -3 \text{ volts} \end{array} \right\}$

GENERAL CHARACTERISTICS

ELECTRICAL DATA

Heater Voltage, A-C or D-C . . . . .			10 volts
Heater Current . . . . .			320 milliamperes
Direct Interelectrode Capacitances	WITHOUT EXTERNAL SHIELD	WITH EXTERNAL SHIELD (RMA#311)	
Grid to Plate (maximum) . . . . .	0.016	*0.009	uuf
Input . . . . .	5.9	* 6.5	uuf
Output . . . . .	12.4	* 13.0	uuf

\* With external shield (RMA#311) Connected to Cathode (Pin #5)

MECHANICAL DATA

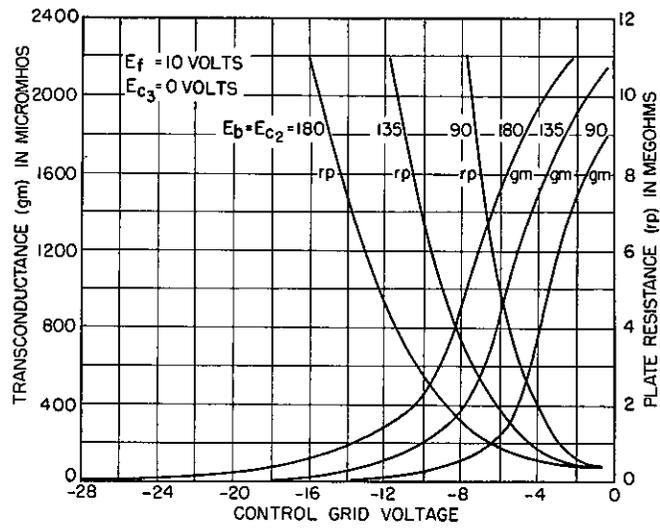
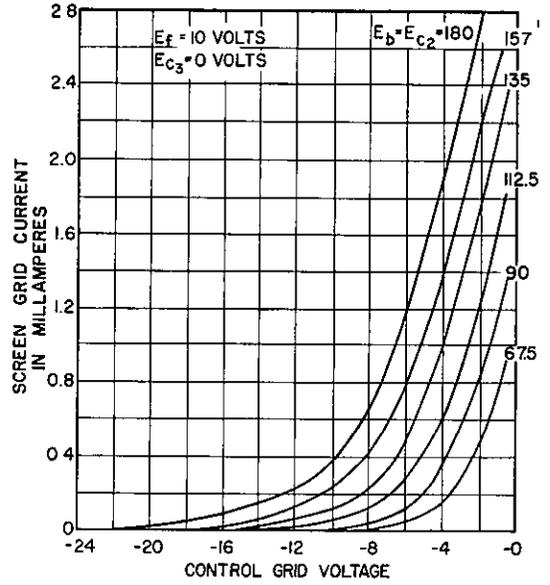
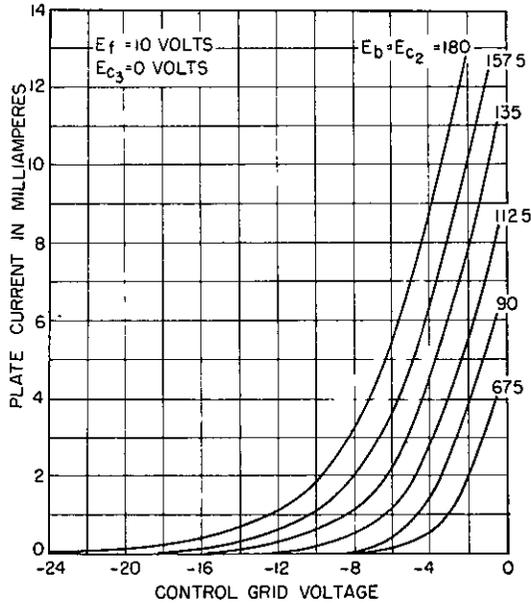
Cathode . . . . .	Coated unipotential
Bulb . . . . .	ST12
Base . . . . .	Small 6-pin
Mounting position . . . . .	Any
Dimensions and pin connections shown in outline drawing on Page 5	

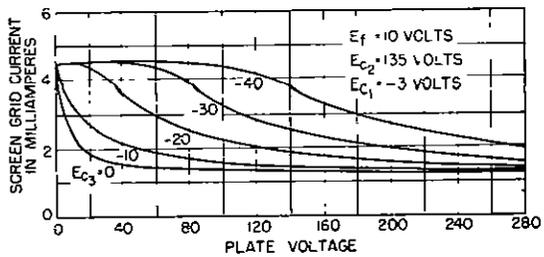
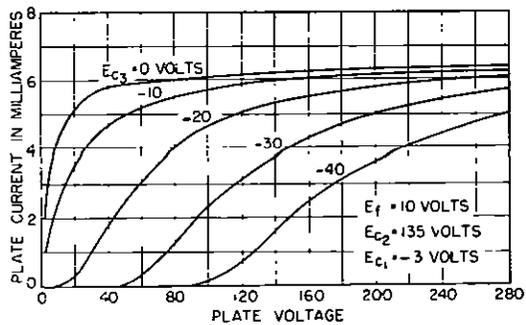
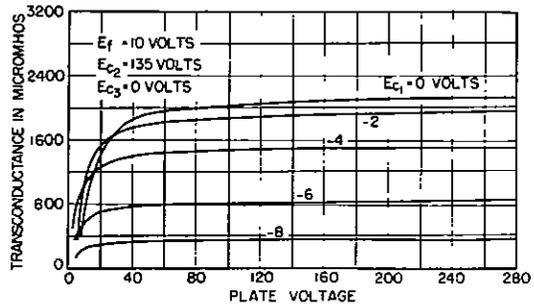
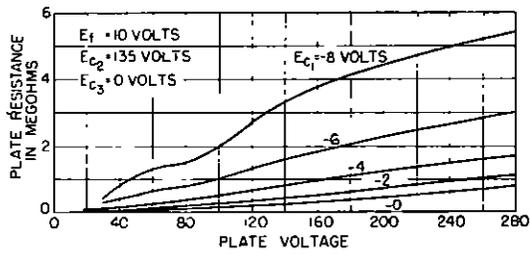
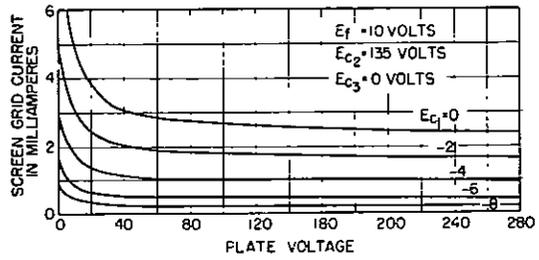
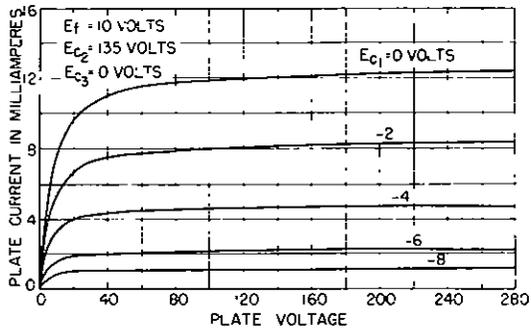
MAXIMUM RATINGS, DESIGN-CENTER VALUES

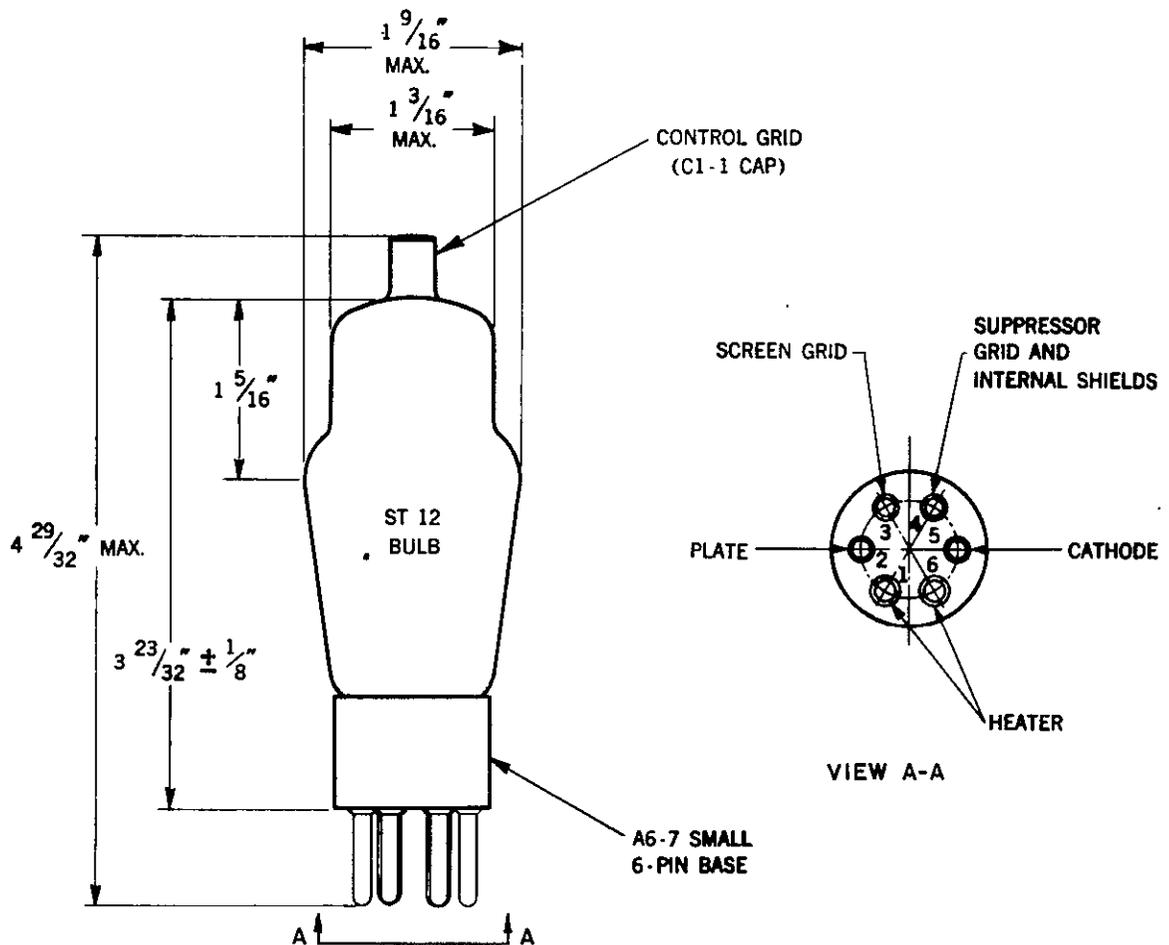
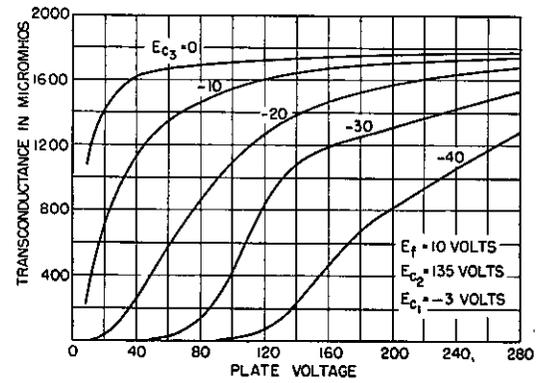
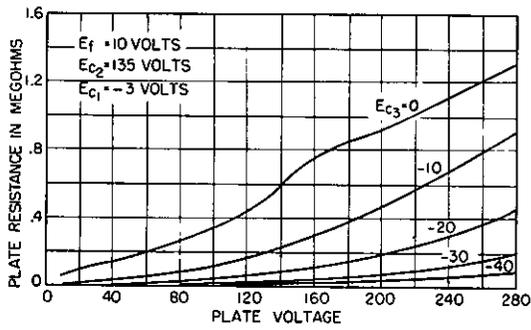
Plate Voltage . . . . .	250 volts
Screen Grid Voltage . . . . .	180 volts
Plate Dissipation . . . . .	2 watts
Screen Grid Dissipation . . . . .	0.4 watt
Cathode Current . . . . .	10 milliamperes
Heater-Cathode Voltage . . . . .	150 volts

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

Plate Voltage . . . . .	135	180	250 volts
Screen Grid Voltage . . . . .	135	135	135 volts
Control Grid Voltage . . . . .	-3	-3	-3 volts
Suppressor Grid Voltage . . . . .	0	0	0 volts
Plate Current . . . . .	6.2	6.3	6.35 milliamperes
Screen Grid Current . . . . .	1.3	1.27	1.24 milliamperes
Peak A-F Signal Voltage . . . . .	3.0	1.5	2.0 volts
Plate Resistance . . . . .	0.55	0.85	1.16 megohms
Transconductance . . . . .	1730	1740	1750 micromhos
Load Resistance . . . . .	30000	100000	100000 ohms
Power Output . . . . .	230	150	300 milliwatts
Total Harmonic Distortion . . . . .	6.0	7.0	8.0 per cent
Control Grid Voltage (aproximate) for Transconductance of 10 micromhos . . . . .	-18.5	-18.5	-18.5 volts







## *Western Electric*

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