Electronic TUBES

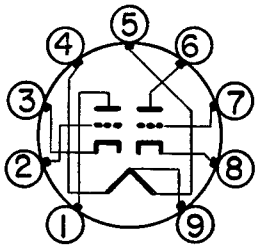
12AT7

TWIN TRIODE

DESCRIPTION AND RATING

The 12AT7 is a miniature, high-mu, twin triode designed for use as a grounded-grid radio-frequency amplifier or as a combined oscillator and mixer at frequencies below approximately 300 megacycles.

BASING DIAGRAM



GENERAL

ELECTRICAL

Cathode—Coated Unipotential	Series	Parallel	
Heater Voltage, AC or DC	12.6	6.3	Volts
Heater Current	0.15	0.3	Amperes

	With	Without

CHACTERISTICS AND TYPICAL OPERATION

CLASS A_1 AMPLIFIER, EACH SECTION

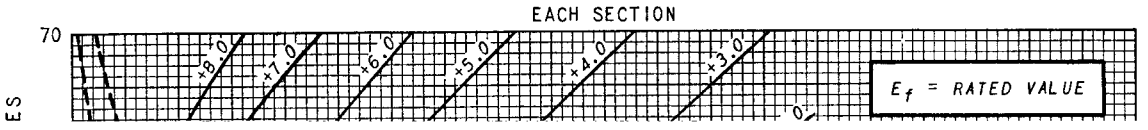
Plate Voltage	100	250	Volts
Cathode-Bias Resistor	270	200	Ohms
Amplification Factor	60	60	
Plate Resistance, approximate	15000	10900	Ohms
Transconductance	4000	5500	Micromhos
Plate Current	3.7	10	Milliamperes
Grid Voltage, approximate			
Ib = 10 Microamperes	−5	−12	Volts

* With external shield (RETMA 315) connected to cathode of section under test.

† With external shield (RETMA 315) connected to grid of section under test.

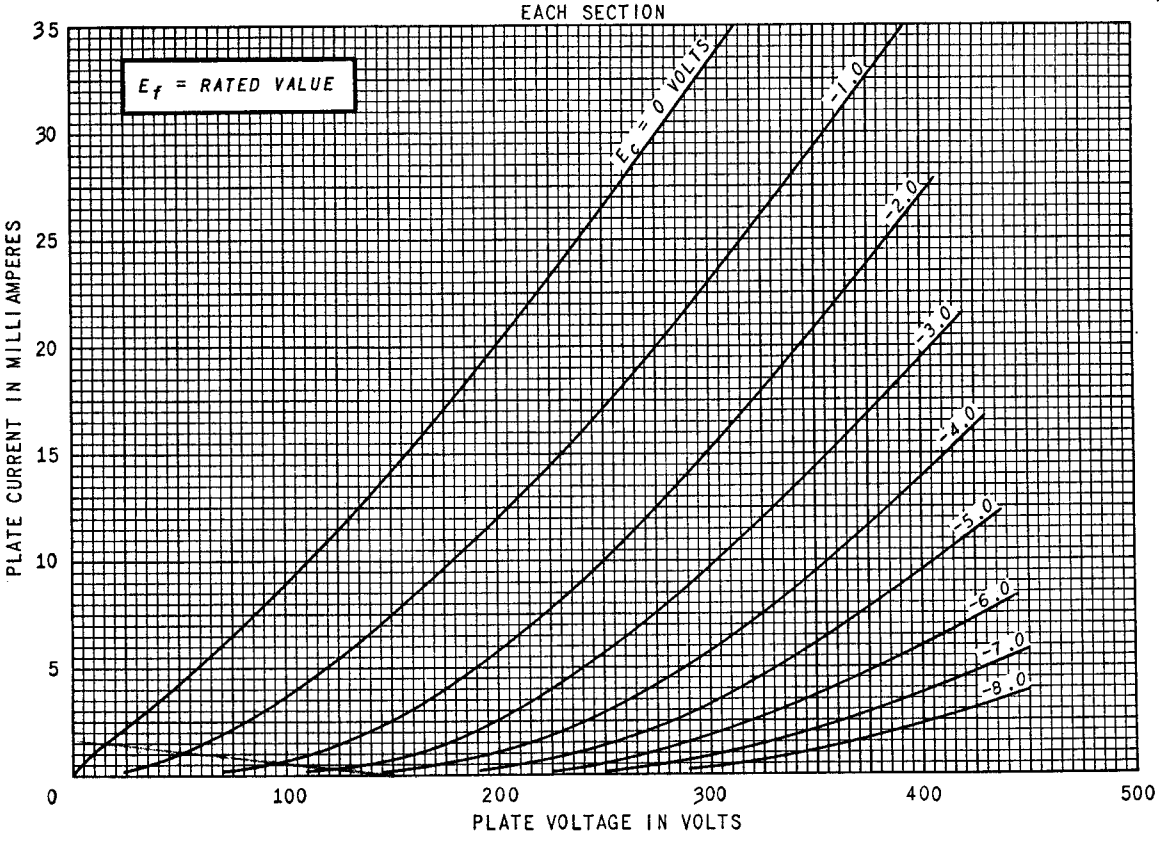
AVERAGE PLATE CHARACTERISTICS

EACH SECTION

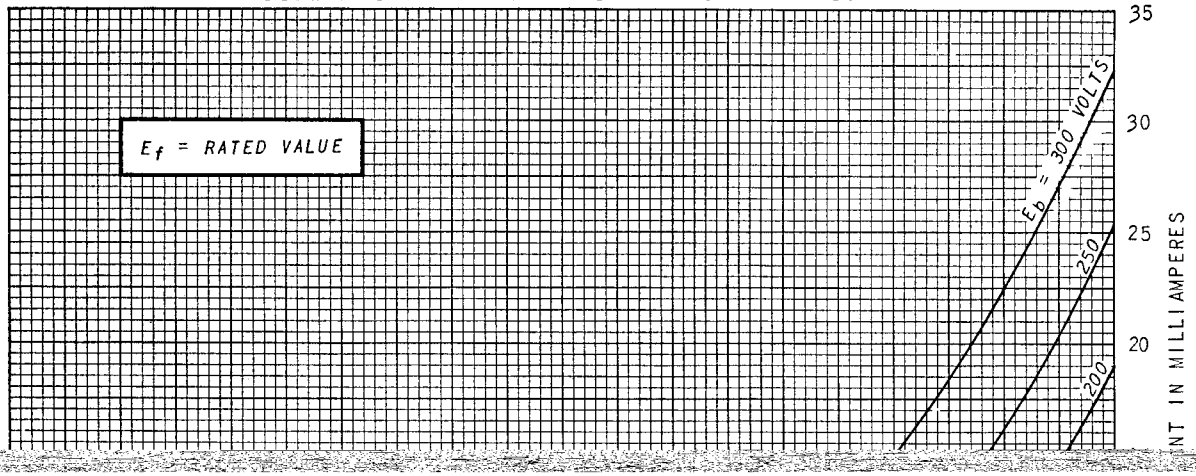


AVERAGE PLATE CHARACTERISTICS

EACH SECTION



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE CHARACTERISTICS