



7B7

Description and Rating

RADIO-FREQUENCY-AMPLIFIER PENTODE

GENERAL DESCRIPTION

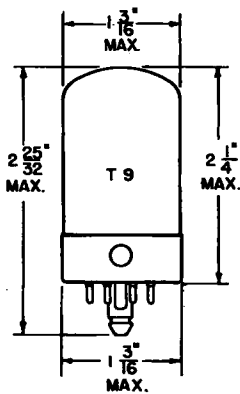
Principal Application: The 7B7 is a remote cut-off amplifier pentode designed for use as a radio-frequency or intermediate-frequency amplifier in a-c, a-c/d-c and auto receivers.

Cathode: Coated Unipotential
 Heater Voltage (A-C or D-C) 6.3 Volts
 Heater Current 0.15 Ampere
 Envelope: T-9 Glass
 Base: D8-I Locking-In 8-Pin

Mounting Position: Any
 Direct Interelectrode Capacitances: *

Grid Number 1 to Plate (Max) 0.007 $\mu\mu\text{f}$
 Input 5.0 $\mu\mu\text{f}$
 Output 6.0 $\mu\mu\text{f}$

PHYSICAL DIMENSIONS

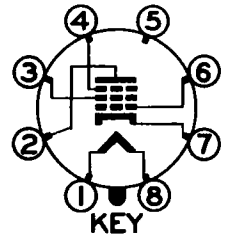


RMA 9-30

TERMINAL CONNECTIONS

- Pin 1 - Heater
- Pin 2 - Plate
- Pin 3 - Grid Number 2
- Pin 4 - Grid Number 3
- Pin 5 - Internal Shield
- Pin 6 - Grid Number 1
- Pin 7 - Cathode
- Pin 8 - Heater

BASING DIAGRAM



RMA 8V
BOTTOM VIEW

MAXIMUM RATINGS

DESIGN CENTER VALUES:

Plate Voltage	300	Volts
Screen (Grid Number 2) Voltage	100	Volts
Screen Supply Voltage	300	Volts
Plate Dissipation	2.25	Watts
Screen Dissipation	0.25	Watt
Heater-Cathode Voltage	90	Volts

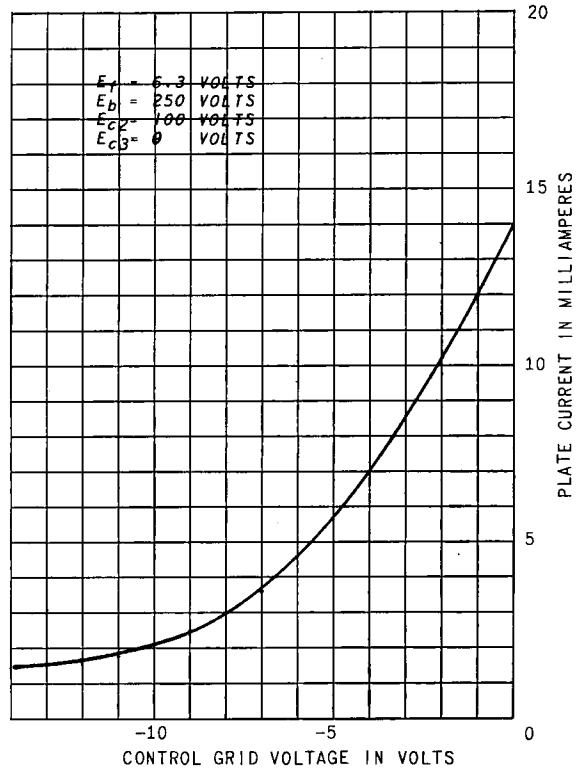
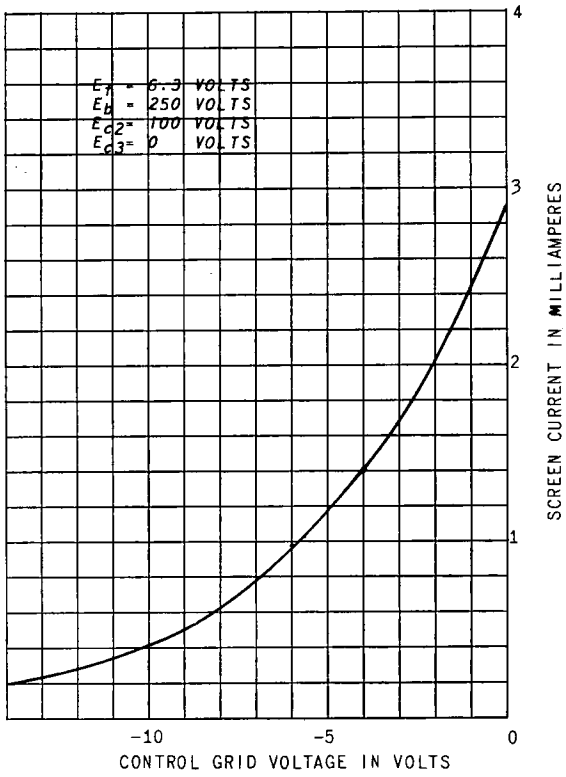
CHARACTERISTICS AND TYPICAL OPERATION

CLASS A₁ AMPLIFIER:

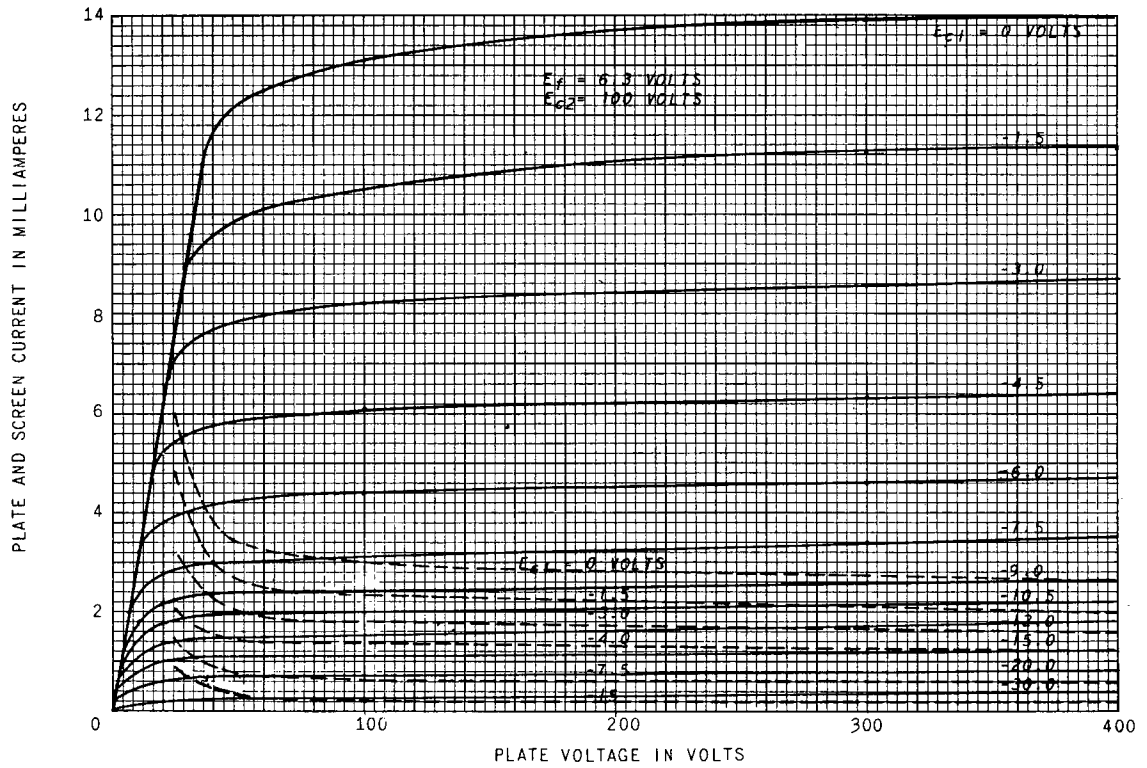
Plate Voltage	100	250	Volts
Screen Voltage	100	100	Volts
Grid Number 1 Voltage	-3	-3	Volts
Self-Bias Resistor	300	300	Ohms
Grid Number 3 Voltage	Connected to Cathode at Socket		
Plate Current	8.2	8.5	Milliamperes
Screen Current	1.8	1.7	Milliamperes
Transconductance	1675	1750	Micromhos
Plate Resistance	0.3	0.75	Megohm
Grid Number 1 Voltage for G _m = 10 Micromhos (Approx)	-40	-40	Volts

* With external shield connected to cathode.

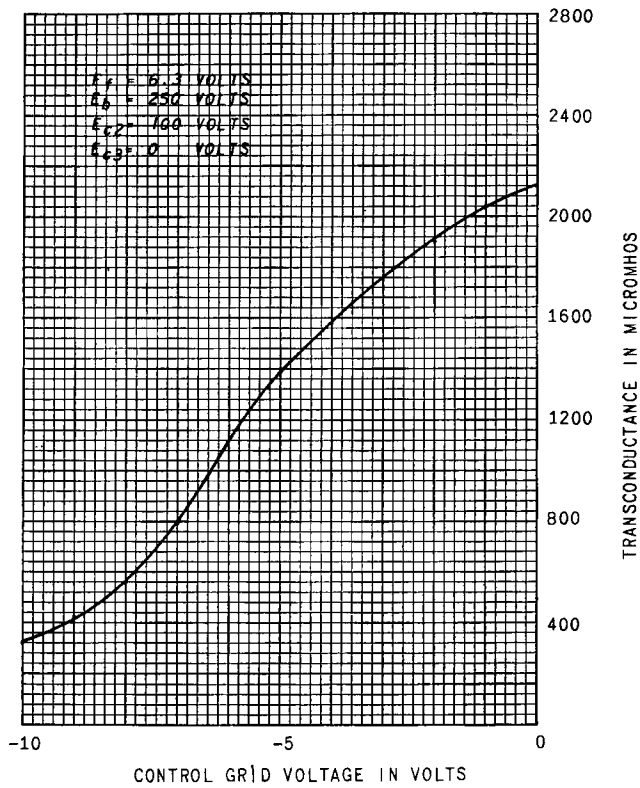
AVERAGE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS



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