



7B5-LT

POWER AMPLIFIER PENTODE (TENTATIVE DATA)

HEATER VOLTAGE (A.C. or D.C.)	6.3□	Volts
HEATER CURRENT	0.4□	Ampere
MAXIMUM OVERALL LENGTH	3-5/32"	
MAXIMUM SEATED HEIGHT	2-5/8"	
MAXIMUM DIAMETER	1-1/4"	
BULB	T-9	
BASE	Small Wafer Octalox	8-Pin with Sleeve
BASING DESIGNATION	6AE	

- Nominal value is 7 volts.
 □□ Nominal value is 0.43 ampere.

Amplifier - Class A₁

PLATE VOLTAGE	315	max.*	Volts
SCREEN VOLTAGE	250	max.*	Volts
PLATE DISSIPATION	8.5	max.*	Watts
SCREEN DISSIPATION	2.8	max.*	Watts
TYPICAL OPERATION and CHARACTERISTICS:			
Heater Voltage #	6.3	6.3	6.3 Volts
Plate Voltage	100	250	315 Volts
Screen Voltage	100	250	250 Volts
Grid Voltage ##	-7	-18	-21 Volts
Peak A-F Grid Voltage	7	18	21 Volts
Zero-Signal Plate Current	9	32	25.5 Milliampere
Max.-Signal Plate Current	9.5	33	28 Milliampere
Zero-Signal Screen Current	1.6	5.5	4 Milliampere
Max.-Signal Screen Current	3	10	9 Milliampere
Plate Resistance	104000	68000	75000 Ohms
Transconductance	1500	2300	2100 Micromhos
Load Resistance	12000	7600	9000 Ohms
Total Harmonic Distortion	11	11	15 Per Cent
Max.-Signal Power Output	0.35	3.4	4.5 watts

* Design maximum for 117-volt line.

In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.

The type of input coupling used should not introduce too much resistance in the grid circuit. Transformer- or impedance-input coupling devices are recommended. When the grid circuit has a resistance not higher than 0.1 megohm, fixed bias may be used; for higher values, cathode bias is required. With cathode bias, the grid circuit may have a resistance not to exceed 1.0 megohm.

Pin Connections

Pin 1 - Heater	Pin 6 - Grid
Pin 2 - Plate	Pin 7 - Cathode
Pin 3 - Screen	Pin 8 - Heater
Pin 4 - No Connection	Plug - No Connection
Pin 5 - No Connection	

(Pin numbers are according to RMA system)

Operating Position

Vertical or Horizontal - No restrictions