RMA Release # 234

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 A_1

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	Milliamperes
Max.-Signal Plate Current	9.5	33	28	Milliamperes
Zero-Signal Screen Current	1.6	5.5	4	Milliamperes
Max.-Signal Screen Current	3	10	9	Milliamperes
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

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