TENTATIVE DATA

TUNG-SOL

BEAM PENTODE
MINIATURE TYPE

COATED FILAMENT

SERIES FILAMENT

E_f applied between pins 1 & 7
E_g1 referred to pin 1

PARALLEL FILAMENT

E_f applied between pin 5 & pin 1
7 tied together
E_g1 referred to pin 1

2.8 VOLTS
25 MA.

1.4 VOLTS
50 MA.

DC

A shunting resistor must be connected between pins 1 & 5 for series-filament operation. Its value should be such that the voltage across the shunted section is equal to the voltage between pins 5 & 1. An additional shunting resistor may be necessary between pins 1 and 7 if other tubes used in series-filament arrangement contribute to the filament current of the 3E5.

ANY MOUNTING POSITION

THE 3E5 IS A FILAMENTARY TYPE BEAM PENTODE POWER AMPLIFIER USING THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED SPECIFICALLY FOR USE IN THE OUTPUT STAGE OF PORTABLE RECEIVERS.

RATINGS

INTERPRETED ACCORDING TO RMA STANDARD MO-210

FILAMENT VOLTAGE

PARALLEL FILAMENT 1.4 VOLTS
SERIES FILAMENT 2.8 VOLTS

MAXIMUM PLATE VOLTAGE

110 VOLTS

110 VOLTS

MAXIMUM GRID #2 VOLTAGE

110 VOLTS

110 VOLTS

MAXIMUM CATHODE CURRENT

8 MA.

4A MA.

A each 1.4 Volts filament section.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A1 AMPLIFIER

FILAMENT VOLTAGE

PARALLEL FILAMENT 1.4 VOLTS
SERIES FILAMENT 2.8 VOLTS

FILAMENT CURRENT

50 MA.

50 MA.

PLATE VOLTAGE

67.5 VOLTS

70 VOLTS

GRID #2 VOLTAGE

67.5 VOLTS

90 VOLTS

GRID #1 VOLTAGE

-5 VOLTS

-8 VOLTS

PEAK AF GRID #1 VOLTAGE

5 VOLTS

8 VOLTS

PLATE RESISTANCE

120 000 OHMS

140 000 OHMS

110 000 OHMS

120 000 OHMS

TRANSCONDUCTANCE

1 300 uA/MA

1 200 uA/MA

1 200 uA/MA

1 100 uA/MA

LOAD RESISTANCE

7 000 OHMS

8 000 OHMS

7 000 OHMS

8 000 OHMS

TOTAL HARMONIC DISTORTION

7.5 PERCENT

9.5 PERCENT

10.5 PERCENT

11 PERCENT

POWER OUTPUT

100 MW.

200 MW.

90 MW.

175 MW.