

DUO - DIODE POWER AMPLIFIER PENTODE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage	6.3	a.c. or d.c. volts
Current	0.8	amps.

Direct Interelectrode Capacitances:^o

Pentode Unit:

Grid to Plate	0.5	max.	μmF
Input	11.5		μmF
Output	9.5		μmF

Diode Units:

Diode (pin 1) to Diode (pin 6)	0.01	max.	μmF
Diode (pin 1) to Pentode Plate	0.7	max.	μmF
Diode (pin 6) to Pentode Plate	0.8	max.	μmF
Diode (pin 1) to Pentode Grid	0.1	max.	μmF
Diode (pin 6) to Pentode Grid	0.1	max.	μmF

^oWith no external shield

Mechanical:

Mounting Position

Maximum Overall Length Any

Maximum Seated Length 2-5/8"

Length, Base Seat to Bulb Top (excluding tip) 2-3/8"

Maximum Diameter 7/8"

Bulb T-6-2

Base Small-Button Noval 9-Pin

Base Connections for BOTTOM VIEW

Pin 1 - Diode Plate

Pin 7 - Cathode and

Pin 2 - Pentode

Pentode Grid

Plate

No. 3.

Pin 3 - Pentode

Pin 8 - Pentode Grid

Grid No. 2

No. 1.

Pin 4 - Heater

Pin 9 - Cathode and

Pin 5 - Heater

Pentode Grid

Pin 6 - Diode Plate

No. 3



DUO-DIODE POWER AMPLIFIER PENTODE

PENTODE UNITA-F POWER AMPLIFIER - Class A₁

Maximum Ratings; Design-Centre Values:

PLATE VOLTAGE	250	max. volts.
GRID NO. 2 VOLTAGE	250	max. volts.
PLATE DISSIPATION	10	max. watts.
GRID NO. 2 DISSIPATION	2	max. watts.
<u>PEAK HEATER-CATHODE VOLTAGE:</u>		
Heater negative with respect to cathode	90	max. volts.
Heater positive with respect to cathode	90	max. volts.

Typical Operation and Characteristics:

Plate Voltage	180	250 volts.
Grid No. 2 (Screen) Voltage	180	250 volts.
Grid No. 1 (Control-Grid) Voltage	-4	-5 volts.
Peak A-F Grid No. 1 Volt gs	4	5 volts.
Zero-Sig. Plate Current	20	38 mA.
Zero-Sig. Grid No. 2 Current	3.5	6.0 mA.
Plate Resistance (Approx.)	130000	100000 ohms.
Transconductance	8000	10000 μ ahms.
Load Resistance	7000	7000 ohms.
Max. Sig. Total Harmonic Distortion	10	10 %
Max. Sig. Power Output	2	4 watts.

Maximum Circuit Values (for maximum rated conditions):

Grid No. 1 -- Circuit Resistance:

For fixed bias	0.1 megohm
For cathode bias	0.5 megohm

DIODE UNITS

Maximum Ratings, Design-Centre Values:

PLATE CURRENT (For each diode)	1.0 max. mA
--------------------------------	-------------

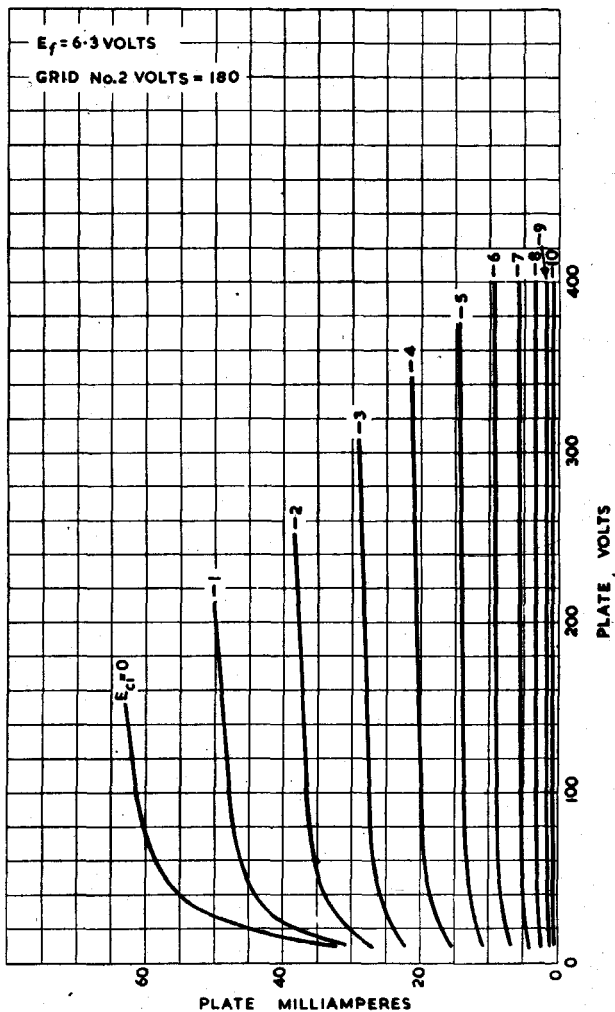
Diode considerations:

The two diode units are placed on opposite sides of, and parallel to the cathode, the sleeve of which is common also to the pentode unit.

The minimum diode current per plate with an applied d.c. voltage of 10 volts is 0.8 mA.

6BV7

AVERAGE PLATE CHARACTERISTICS



6BV7

AVERAGE PLATE CHARACTERISTICS

