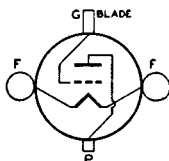


DC GRID VOLTAGE	-400 <i>max</i>	volts
DC PLATE CURRENT	120 <i>max</i>	ma
PLATE INPUT	150 <i>max</i>	watts
PLATE DISSIPATION	100 <i>max</i>	watts

POWER TRIODE

849

Thoriated-tungsten-filament type used as af power amplifier and modulator and as rf power amplifier and oscillator. May be used with full input up to 3 Mc and with reduced input up to 30 Mc. Tube may be mounted in vertical position with filament end up, or in horizontal position with plate in vertical plane. Maximum over-all length, 14 $\frac{3}{8}$ inches; maximum diameter, 4 $\frac{1}{16}$ inches. Filament volts

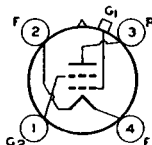


(ac/dc), 11; amperes, 5. Direct interelectrode capacitances: grid to plate, 34 μ f; grid to filament, 17 μ f; plate to filament, 3 μ f. Maximum CCS ratings as RF POWER AMPLIFIER AND OSCILLATOR: dc plate volts, 2500 *max*; dc grid volts, -500 *max*; dc plate amperes, 0.35 *max*; dc grid amperes, 0.125 *max*; plate input, 875 *max* watts; plate dissipation, 400 *max* watts. Plate shows cherry-red color when tube is operated at maximum CCS ratings. The 849 is a DISCONTINUED type listed for reference only.

POWER TETRODE

850

Thoriated-tungsten-filament type used as rf power amplifier and oscillator at frequencies up to 15 Mc. Requires Jumbo four-contact socket and may be mounted in vertical position with base up or down, or in horizontal position with pins 1 and 3 in vertical plane. OUTLINE 51, Outlines Section. Filament volts (ac/dc), 10; amperes, 3.25. Direct interelectrode capacitances: grid No.1 to plate (with external shield-

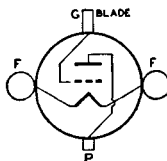


ing), 0.25 *max* μ f; grid No.1 to filament and grid No.2, 17 μ f; plate to filament and grid No.2, 25 μ f. Maximum CCS ratings as RF POWER AMPLIFIER AND OSCILLATOR: dc plate volts, 1250 *max*; dc grid-No.2 volts, 400 *max*; dc grid-No. 1 volts, -400 *max*; dc plate milliamperes, 175 *max*; dc grid-No. 1 milliamperes, 40 *max*; plate input, 220 *max* watts; grid-No.2 input, 10 *max* watts; plate dissipation, 100 *max* watts. Plate shows a barely perceptible red color when tube is operated at maximum CCS ratings. The 850 is a DISCONTINUED type listed for reference only.

POWER TRIODE

851

Thoriated-tungsten-filament type used as af power amplifier and modulator and as rf power amplifier and oscillator. May be used with full input up to 3 Mc. For operation at 7 Mc, plate voltage and plate input should be reduced to 75 per cent of maximum ratings; at 15 Mc, to 50 per cent. Tube may be mounted in vertical position with filament end up, or in horizontal position with plate in vertical plane. OUTLINE 64, Outlines Section. The 851 is used principally for renewal purposes.



FILAMENT VOLTAGE (AC/DC)	11.0	volts
FILAMENT CURRENT	15.5	amperes
AMPLIFICATION FACTOR	20.5	
DIRECT INTERELECTRODE CAPACITANCES:		
Grid to plate	47	μ f
Grid to filament	25.5	μ f
Plate to filament	4.5	μ f

	Class B Modulator	Class C Telegraphy#	
Maximum CCS Ratings:			
DC PLATE VOLTAGE	3000 <i>max</i>	2500 <i>max</i>	volts
DC GRID VOLTAGE	—	-500 <i>max</i>	volts
DC PLATE CURRENT	1 $\blacksquare$ <i>max</i>	1 <i>max</i>	ampere
DC GRID CURRENT	—	0.2 <i>max</i>	ampere
PLATE INPUT	2250 $\bullet$ <i>max</i>	2500 <i>max</i>	watts
PLATE DISSIPATION	750 $\blacksquare$ <i>max</i>	750 <i>max</i>	watts

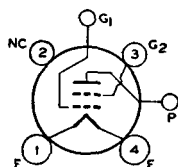
Key-down conditions per tube without amplitude modulation. Amplitude modulation essentially neg-

active may be used if the positive peak of the audio-frequency envelope does not exceed 115 per cent of the carrier conditions.

• For maximum-signal conditions.

• Averaged over any audio-frequency cycle of sine-wave form.

POWER TETRODE



860

Thoriated-tungsten-filament type used as rf power amplifier and oscillator. May be used with full input up to 30 Mc. For operation at 60 Mc, plate voltage and plate input should be reduced to 75 per cent of maximum ratings; at 120 Mc, to 50 per cent. Requires Small four-contact socket and may be mounted in vertical position only, base down. OUTLINE 55, *Outlines* Section. Plate shows no color when tube is operated at maximum CCS ratings. The 860 is used principally for renewal purposes.

FILAMENT VOLTAGE (AC/DC)	10	volts
FILAMENT CURRENT	3.25	amperes
TRANSCONDUCTANCE (For plate current of 50 milliamperes)	1100	μ mhos
AMPLIFICATION FACTOR	200	
DIRECT INTERELECTRODE CAPACITANCES:		
Grid No.1 to plate (With external shielding)	0.08 max	μ f
Grid No.1 to filament and grid No.2	7.75	μ f
Plate to filament and grid No.2	7.5	μ f

RF POWER AMPLIFIER AND OSCILLATOR—Class C Telegraphy# and

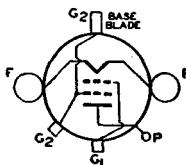
RF POWER AMPLIFIER—Class C FM Telephony

Maximum CCS Ratings:

DC PLATE VOLTAGE	3000 max	volts
DC GRID-NO.2 (SCREEN-GRID) VOLTAGE	500 max	volts
DC GRID-NO.1 (CONTROL-GRID) VOLTAGE	-800 max	volts
DC PLATE CURRENT	150 max	ma
DC GRID-NO.1 CURRENT	40 max	ma
PLATE INPUT	300 max	watts
GRID-NO.2 INPUT	10 max	watts
PLATE DISSIPATION	100 max	watts

Key-down conditions per tube without amplitude modulation. Amplitude modulation essentially negative may be used if the positive peak of the audio-frequency envelope does not exceed 115 per cent of the carrier conditions.

POWER TETRODE



861

Thoriated-tungsten-filament type used as rf power amplifier and oscillator. May be used with full input up to 20 Mc. For operation at 30 Mc, plate voltage and plate input should be reduced to 82 per cent of maximum ratings; at 63 Mc, to 53 per cent. Tube may be mounted in vertical position only, filament end up. OUTLINE 63, *Outlines* section. Plate shows an orange-red color when tube is operated at maximum CCS ratings. The 861 is used principally for renewal purposes.

FILAMENT VOLTAGE (AC/DC)	11	volts
FILAMENT CURRENT	10	amperes
TRANSCONDUCTANCE (For plate current of 130 milliamperes)	2400	μ mhos
AMPLIFICATION FACTOR	300	
DIRECT INTERELECTRODE CAPACITANCES:		
Grid No.1 to plate (With external shielding)	0.10 max	μ f
Grid No.1 to filament and grid No.2	14	μ f
Plate to filament and grid No.2	11	μ f

RF POWER AMPLIFIER AND OSCILLATOR—Class C Telegraphy# and

RF POWER AMPLIFIER—Class C FM Telephony

Maximum CCS Ratings:

DC PLATE VOLTAGE	3500 max	volts
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