803

PENTODE

125 WATT PLATE DISSIPATION

$25.00

GENERAL CHARACTERISTICS

Filament Voltage, volts	10
Filament Current, amps	5
Transconductance, Ip of 62.5 Ma., umhos	4000
Capacitance, Grid-Plate (with external shielding), max. uuf	0.15
Capacitance, Input, uuf	17.5
Capacitance, Output, uuf	29

R-F POWER AMPLIFIER AND OSCILLATOR PENTODE, CLASS C

Key-Down Conditions Per Tube Without Modulation§

Plate Volts, D. C.	1250	1500	2000
Plate Current, D. C., milliamperes	160	160	160
Grid Bias, Volts, D. C., or	—90	—90	—90
From Cathode Resistor, ohms, or	415	415	415
From Grid Resistor, ohms	7500	7500	7500
Grid Volts, Peak R-F	175	175	175
Grid Current, D. C., milliamperes	12	12	12
Screen Volts, D. C.	500	500	500
Screen Current, D. C., milliamperes	45	45	45
Screen Resistor	Not Recommended		
Suppressor Volts, D. C.	40	40	40
Driving Power, watts	2	2	2
Power Output, watts	130	160	210

R-F POWER AMPLIFIER AND OSCILLATOR TETRODE, CLASS C

Grids No. 2 and No. 3 Connected Together

Key-Down Conditions Per Tube Without Modulation§

TYPICAL OPERATION

Plate Volts, D. C.	1250	1500	2000
Plate Current, D. C., milliamperes	160	160	160
Grid Bias, Volts, D. C., or	—90	—90	—90
From Cathode Resistor, ohms	445	445	445
From Grid Resistor, ohms	3200	3300	3500
Grid Volts, Peak R-F	190	190	190
Grid Current, D. C., ma	28	27	26
Screen Volts, D. C.	150	150	150
Screen Current, D. C., milliamperes	15	15	15
Screen Resistor	Not Recommended		
Driving Current, watts	4.6	4.4	4.4
Power Output, watts	130	160	210

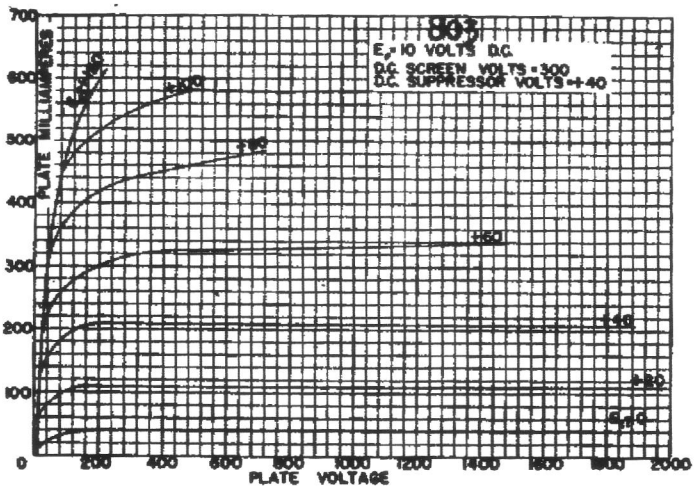
NOTES

*Grid Voltages are given with respect to the mid-point of filament operated on A. C.; if D. C. is used, each stated value of grid voltage should be decreased by 7 volts and the circuit returns connected to the negative end of the filament.

†Connected to modulated plate-voltage supply or modulated fixed supply through resistor.

‡Preferably connected to unmodulated plate-voltage supply through resistor.

§Modulation essentially negative may be used if the positive peak of the audio-frequency envelope does not exceed 115% of the carrier conditions.



SUPPRESSOR-MODULATED R-F POWER AMPLIFIER PENTODE, CLASS C

Carrier Conditions Per Tube for Use With a Maximum Modulation Factor of 1.0

TYPICAL OPERATION

Plate Volts, D. C.	1250	1500	2000
Plate Current, D. C., milliamperes	100	100	80
Grid Bias, Volts, D. C., or	—110	—100	—100
From Grid Resistor, ohms	5000	5000	7000
Grid Volts, Peak R-F	200	190	170
Grid Current, D. C., milliamperes	22	20	15
Screen Resistor, ohms‡	13000	17000	35000
Screen Current, D. C., milliamperes	70	70	48
Suppressor Volts, D. C.	—70	—90	—110
Suppressor Volts, Peak A-F	110	130	150
Driving Power, watts	4	3.5	2.5
Power Output, watts	40	50	53

PLATE MODULATED R-F POWER AMPLIFIER PENTODE, CLASS C

Carrier Conditions Per Tube for Use With a Maximum Modulation Factor of 1.0

TYPICAL OPERATION

Plate Volts	1250	1600
Plate Current, D. C., milliamperes	150	150
Grid Bias, Volts, D. C., or	—80	—80
From Grid Resistor, ohms	4000	4000
Grid Volts, Peak R-F	180	180
Grid Current, D. C., milliamperes	20	20
Screen Volts, D. C., or†	400	500
Screen Resistor, ohms	16000	20000
Screen Current, D. C., milliamperes	55	55
Suppressor Volts, D. C.	100	100
Driving Power, watts	4	4
Power Output, watts	125	155

PLATE MODULATED R-F POWER AMPLIFIER TETRODE, CLASS C

Grids No. 2 and No. 3 Connected Together

Carrier Conditions Per Tube for Use With a Maximum Modulation Factor of 1.0

TYPICAL OPERATION

Plate Volts, D. C.	1250	1600
Plate Current, D. C., milliamperes	150	150
Grid Bias Volts, D. C., or	—180	—180
From Grid Resistor, ohms	4000	4000
Grid Volts, Peak R-F	305	320
Grid Current, D. C., milliamperes	45	45
Screen Volts, D. C., or	130	130
Screen Resistor, ohms‡	15000	20000
Screen Current, D. C., milliamperes	75	75
Driving Power, watts	15	15
Power Output, watts	125	155