

*S.S.B.
Linear Amplifier*

ZERO BIAS POWER TRIODE

572 B
Type 811A
and
811 - A/B
Replacement

FEATURES:

- ▶ TWO 572 - B's IN PARALLEL WILL PERMIT 1 KW INPUT.
- ▶ IN EVERY CASE DIRECT PLUG-IN REPLACEMENT FOR CONVENTIONAL 811A's.
- ▶ CAPABLE OF 225 WATTS PLATE DISSIPATION.
- ▶ 300% INCREASE PLATE DISSIPATION OVER 811A's.
- ▶ ZERCONIUM IMPREGNATED GRAPHITE ANODE.
- ▶ RUGGED BONDED THORIA FILAMENT - FOR LONGER LIFE.

GENERAL CHARACTERISTICS

ELECTRICAL:

| | |
|------------------------------|-----------|
| Filament Voltage | 6.3 volts |
| Current | 4.0 amps |
| Amplification Factor | 190 |
| Interelectrode Capacitances: | |
| Grid - Plate | 6.0 mmf |
| Grid - Filament | 6.0 mmf |
| Plate - Filament | 0.8 mmf |

MECHANICAL:

| | |
|----------------------------------|---------------------------------------|
| Base | 4 pin |
| Recommended Socket | Johnson 122 - 224 or National XC4CIR4 |
| Dimensions - see outline drawing | |
| Bulb (Nonex - hard glass) | Max. temp. 200°C |

Note: O'Malley Type 572 - B can be mounted base up or base down. If mounted in a horizontal position, filament and grid should be in a vertical plane.

FOR LONGER LIFE: If the free circulation of air around the tube is restricted, a small fan or centrifugal blower may be used to provide additional cooling for the tube.

Special Applications: If it is desired to operate this tube under conditions widely different from those given here, please write to Application Engineering Dept., for information and recommendations.

O'MALLEY ZERO BIAS POWER TRIODE :

CLASS B - SSB SERVICE
 Two-Tone Modulation @ 30 Mc.

MAXIMUM RATINGS:

| | |
|-----------------------------|-----------------|
| D-C Plate Voltage | 2500 Volts max. |
| D-C Plate Grid | 250 Ma. max. |
| D-C Grid Current | 50 Ma. max. |
| D-C Plate Input | 560 Watts |
| Plate Dissipation | 225 Watts |

TYPICAL OPERATION:
 Two-Tone Modulation @ 30 Mc.

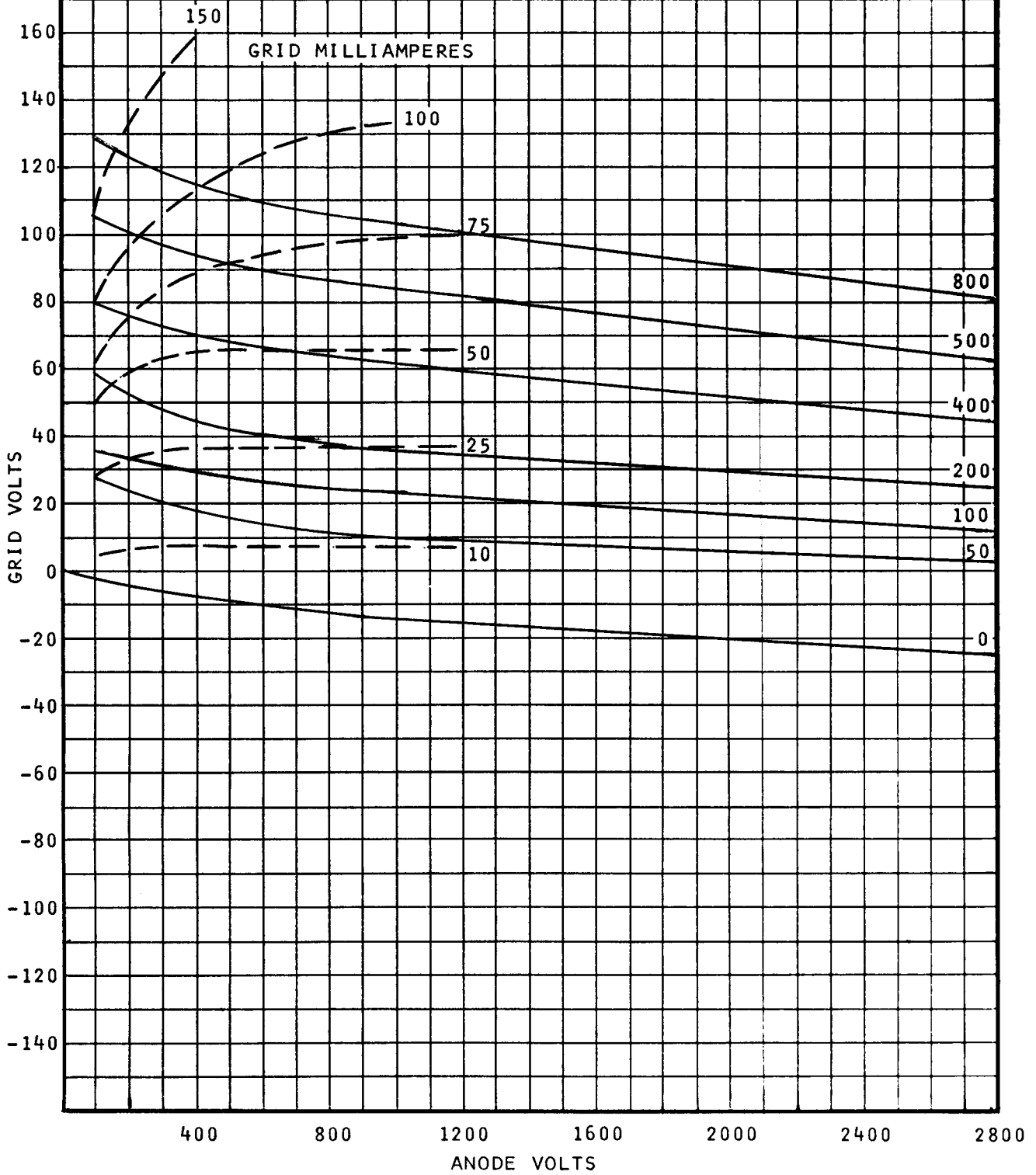
| | |
|--|-----------------|
| D-C Plate Voltage | 2500 Volts max. |
| D-C Grid Voltage | 0 Volts |
| Zero Signal D-C Plate Current | 25 Ma. |
| D-C Plate Current at Peak Envelope | 225 Ma. |
| Average Plate Current | 160 Ma. |
| Peak Plate Current | 675 Ma. |
| Peak Positive Grid Voltage | 110 Volts |
| Average D-C Grid Current | 35 Ma. |
| Minimum Plate Voltage | 135 Volts |
| D-C Input at Peak of Envelope | 560 Watts |
| Peak Envelope Power Output | 400 Watts |
| Plate Dissipation | 195 Watts |
| Peak R-F Grid Voltage | 110 Volts |
| Peak Grid Current | 150 Ma. |
| Peak of Envelope Grid Current | 50 Ma. |
| Driving Power of Tube | 4.2 Watts |
| Effective Load Resistance | 6900 Ohms |

CATHODE DRIVE CONDITIONS:

| | |
|------------------------------|------------|
| Feed Through Power | 17.5 Watts |
|------------------------------|------------|

Note: "Typical Operation" data obtained by calculation from published characteristic curves and direct tests. No allowances of circuit losses, input or output has been made.

TYPE 572-B
CONSTANT CURRENT
CHARACTERISTICS
 $E_F = 6.3 = \text{V.A.C.}$



O'MALLEY ZERO BIAS POWER TRIODE:

AUDIO FREQUENCY POWER
 AMPLIFIER AND MODULATOR
 CLASS B

MAXIMUM RATINGS:

| | |
|-------------------------|-----------------|
| D-C Plate Voltage | 2500 Volts Max. |
| D-C Plate Current | 250 Ma. Max. |
| D-C Grid Current | 50 Ma. Max. |
| D-C Plate Input | 560 Watts |
| Plate Dissipation | 225 Watts |

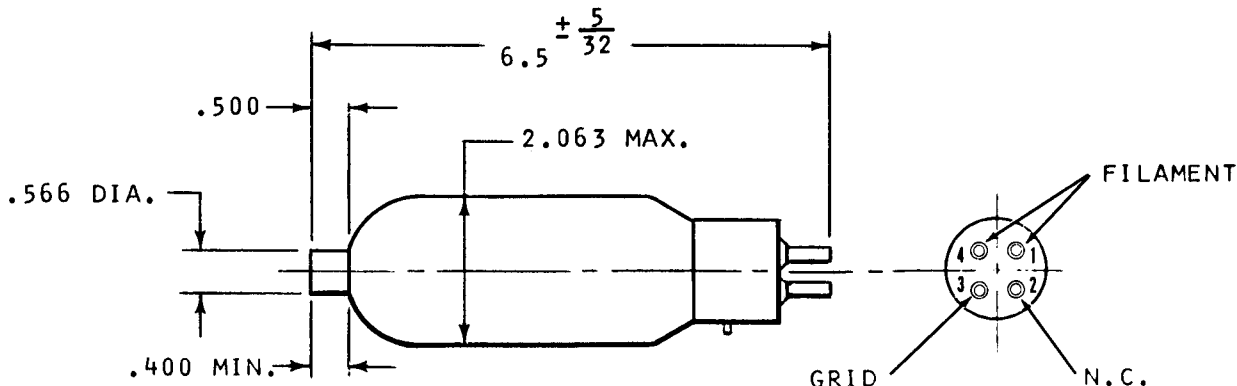
TYPICAL OPERATION (2) TUBES:

| | | | |
|--|--------|--------|-------------|
| D-C Plate Voltage | 1,500 | 2,000 | 2500 Volts |
| D-C Grid Voltage | 0 | 0 | 0 Volts |
| Peak A-F. Grid to Grid Voltage | 170 | 160 | 210 Volts |
| Zero D-C Signal Plate Current | 60 | 70 | 80 Ma. |
| Max. D-C Signal Plate Current | 350 | 360 | 400 Ma. |
| Effective Load Resistance Plate to Plate | 12,500 | 16,500 | 15,000 Ohms |
| Max. Signal Driving Power | 5.5 | 7 | 8.5 Watts |
| Max. Signal Power Output | 380 | 530 | 730 Watts |

R-F POWER AMPLIFIER AND OSCILLATOR
 CLASS C TELEGRAPHY

TYPICAL OPERATION (1) TUBE:

| | | | |
|-----------------------------|-------|-------|-------------|
| D-C Plate Voltage | 1,250 | 1,500 | 2,000 Volts |
| D-C Plate Current | 140 | 173 | 200 Ma. |
| D-C Grid Voltage | -50 | -70 | -70 Volts |
| D-C Grid Current | 45 | 40 | 30 Ma. |
| Peak R-F Grid Voltage | 140 | 175 | 190 Volts |
| Driving Power | 5.6 | 7 | 5.5 Watts |
| Power Output | 135 | 200 | 300 Watts |



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