



The 4CX3000A/8169 is designed to be used as a Class AB1 linear amplifier in audio or radio frequency applications. Its characteristic of low intermodulation distortion makes it especially suitable for single sideband service. This tube is unique in that a production test is included to insure minimum distortion products. The 4CX3000A/8169 must produce a minimum of 5300 watts in Class AB1 service with 3rd order IM distortion at least 32 dB down, from one tone of two-tone signal. The tube is also recommended for use as a Class C radio frequency power amplifier and plate-modulated, radio frequency power amplifier.



4CX3000A/8169

CHARACTERISTICS

Plate Dissipation (Max.) Screen Dissipation (Max.) Grid Dissipation (Max.) Frequency for Max. rating (CW) **Amplification Factor** Filament/Cathode Voltage Current Capacitance Input Output Feedthrough Capacitance Input Output Feedthrough Cooling Base Air Socket Air Chimney Boiler Length Diameter Weight

3.500 Watts 175 Watts 50 Watts 150 MHz 5.5 **Thoriated Tungsten** 9.0 Volts 41.5 Amps **Grounded Cathode** -130 pf 12.5 pf 1.0 pf Grounded Grid 61.0 pf 12.5 pf 0.1 pf Forced Air Special, Breechblock SK-1400 SK-1406 ---7.90 in; 200.70 mm 4.63 in; 117.60 mm 5.5 lb; 2.5 kg

| | | MAXIMU | M RATINGS | TYPICAL OPERATION | | | | |
|-----------------------|--|-----------------------------|----------------------------|-----------------------------|------------------------------|----------------------------|---------------------------|--------------------------------|
| Class of Operation | Type of Service | Plate Voltage (Volts) | Plate Current (Amps) | Plate Voltage (Volts) | Screen Voltage (Volts) | Plate Current (Amps) | Drive Power (Watts) | Output Power (kiloWatts) |
| C | RF amplifier at 30 MHz | 7,000 | 2.0 | 7,000 | 500 | 1.9 | 41 | 11.00 |
| C | AF amplifier plate modulated at 30 MHz | 5,000 | 1.4 | 5,000 | 500 | 1.4 | 31 | 5.75 |
| AB | RF linear amplifier | 7,000 | 2.0 | 5,000 | 850 | 1.7 | | 5.3 |
| AB | AF amplifier or modulator | 6,000 | 2.0 | 6,000 | 850 | 3.1 | | 12.4 |
| | | | | | | | | |

The values listed above represent specified limits for the product and are subject to change. The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.



For information on this and other CPI products, visit our website at: **www.cpii.com**, or contact: CPI MPP Division, Eimac Operation, 607 Hansen Way, Palo Alto, CA 94303 **TELEPHONE:** 1(800) 414-8823. **FAX:** (650) 592-9988 | **EMAIL:** powergrid@cpii.com