

4CW100,000E

The 4CW100,000E is ideal for use as a Class C RF amplifier or oscillator, a Class AB RF linear amplifier, or a Class AB push-pull AF amplifier or modulator as well as a plate and screen-modulated Class C RF amplifier. In a pulse modulator service, it can deliver a peak output of 4 megawatts. The tube is characterized by low input and feedback capacitances and low internal lead inductances.



CHARACTERISTICS

| | |
|--------------------------------|----------------------|
| Plate Dissipation (Max.) | 100,000 Watts |
| Screen Dissipation (Max.) | 1,750 Watts |
| Grid Dissipation (Max.) | 500 Watts |
| Frequency for Max. rating (CW) | 108 MHz |
| Amplification Factor | --- |
| Filament/Cathode | Thoriated Tungsten |
| Voltage | 15.5 Volts |
| Current | 215 Amps |
| Capacitance | Grounded Cathode |
| Input | 370 pf |
| Output | 60.0 pf |
| Feedthrough | 1.0 pf |
| Capacitance | Grounded Grid |
| Input | 175 pf |
| Output | 60.0 pf |
| Feedthrough | 0.35 pf |
| Cooling | Water and Forced Air |
| Base | Special Coaxial |
| Air Socket | SK-2011A |
| Air Chimney | --- |
| Boiler | --- |
| Length | 12.82 in; 325.60 mm |
| Diameter | 9.53 in; 242.10 mm |
| Weight | 38.5 lb; 17.5 kg |

| Class of Operation | Type of Service | MAXIMUM RATINGS | | TYPICAL OPERATION | | | | |
|--------------------|-------------------------------------|-----------------------|----------------------|-----------------------|------------------------|----------------------|---------------------|--------------------------|
| | | Plate Voltage (Volts) | Plate Current (Amps) | Plate Voltage (Volts) | Screen Voltage (Volts) | Plate Current (Amps) | Drive Power (Watts) | Output Power (kiloWatts) |
| C | RF amplifier | 20,000 | 16.0 | 20,000 | 1,500 | 15.2 | 120 | 220.0 |
| C | RF amplifier plate modulated | 17,500 | 16.0 | 15,000 | 750 | 11.7 | 530 | 140.0 |
| AB1 | RF linear amplifier | 20,000 | 16.0 | 18,000 | 1,500 | 13.5 | --- | 168.0 |
| AB1 | AF amplifier or modulator (2 tubes) | 20,000 | 16.0 | 15,000 | 1,500 | 19.5 | --- | 200.0 |

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 Operations, 607 Hansen Way, Palo Alto, CA 94303
TELEPHONE: 1(800) 414-8823. **FAX:** (650) 592-9988 | **EMAIL:** powergrid@cpii.com