

The 3CX10,000U7 high-mu triode is intended for use as a cathode driven RF amplifier in the VHF spectrum. It is a very linear device making it ideally suited for TV service in addition to CW and pulsed RF amplifier service. The 3CX10,000U7 makes use of beam forming cathode and control grid geometry to produce high gain, low grid interception, and zero-bias operation capability. The CV2240B and CV2250B 10kW peak sync VHF-TV Broadcast Cavities are available for use with the 3CX10,000U7.



CHARACTERISTICS

| | |
|--------------------------------|-----------------|
| Plate Dissipation (Max.) | 10,000 Watts |
| Screen Dissipation (Max.) | N/A |
| Grid Dissipation (Max.) | 50 Watts |
| Frequency for Max. rating (CW) | 250 MHz |
| Amplification Factor | 200 |
| Filament/Cathode | Oxide Coated |
| Voltage | 15.0 Volts |
| Current | 13.5 Amps |
| Capacitance | Grounded Grid |
| Input | 86.5 pf |
| Output | 23.2 pf |
| Feedthrough | 0.2 pf |
| Capacitance | --- |
| Input | N/A |
| Output | N/A |
| Feedthrough | N/A |
| Cooling | Forced Air |
| Base | Special Coaxial |
| Air Socket | SK-2500 |
| Air Chimney | SK-2506 |
| Boiler | N/A |
| Length | 7.3 in; 185 mm |
| Diameter | 8.3 in; 211 mm |
| Weight | 20 lb; 9.1 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) |
| AB | Cathode Driven Low Band TV Linear RF Amplifier | 6,500 | 4 | 5,000 | --- | 3.72 | 400 | 10.0 |
| AB | Cathode Driven High Band TV Linear RF Amplifier | 6,500 | 4 | 5,500 | --- | 3.6 | 410 | 10.0 |
| C | Cathode Driven Pulse RF Amplifier Short Pulse | 13,000 | 54 | 7,200 | --- | --- | 1,580 | 40.0 |

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