

The 3CX20,000A7 is a high-mu power triode intended for use as a zero bias Class B RF amplifier or Class C power amplifier or oscillator. Class B operation with zero grid bias offers circuit simplicity. In addition, grounded grid operation is attractive since a power gain as high as twenty times can be obtained.



CHARACTERISTICS

| | |
|--------------------------------|--------------------|
| Plate Dissipation (Max.) | 20,000 Watts |
| Screen Dissipation (Max.) | --- |
| Grid Dissipation (Max.) | 500 Watts |
| Frequency for Max. rating (CW) | 110 MHz |
| Amplification Factor | 200 |
| Filament/Cathode | Thoriated Tungsten |
| Voltage | 6.3 Volts |
| Current | 160 Amps |
| Capacitance | Grounded Cathode |
| Input | 61.0 pf |
| Output | 0.2 pf |
| Feedthrough | 360 pf |
| Capacitance | Grounded Grid |
| Input | 61.0 pf |
| Output | 36.0 pf |
| Feedthrough | 0.2 pf |
| Cooling | Forced Air |
| Base | Coaxial |
| Air Socket | SK-1300 |
| Air Chimney | --- |
| Boiler | --- |
| Length | 8.75 in; 222.20 mm |
| Diameter | 8.31 in; 211.10 mm |
| Weight | 13.5 oz; 6.15 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 | Grid driven RF amplifier at 110 MHz | 10,000 | 5.0 | 7,000 | --- | 4.0 | 430 | 21,300 |
| C | Cathode driven RF amplifier at 110 MHz | 10,000 | 5.0 | 7,800 | --- | 4.2 | 2,300 | 27,500 |
| B | Cathode driven RF amplifier TV service at 216 MHz | 10,000 | 6.0 | 7,200 | --- | 5.8 | 1,700 | 27,500 |
| AB | Cathode driven linear amplifier at 110 MHz | 10,000 | 6.0 | 7,000 | --- | 5.0 | 1,540 | 24,200 |

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
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