



## 4CX20,000E

The 4CX20,000E is a ceramic/metal power tetrode intended for use as a VHF power amplifier. It features a type of internal mechanical structure, which results in rf operating efficiency. Low rf losses in this structure permit operation at full ratings to 110 MHz.

The 4CX20,000E provides high gain in FM Broadcast service and is also recommended for rf linear power amplifier service, including IBOC digital transmission. The anode is rated for 20 kilowatts of dissipation with forced-air cooling and incorporates a compact, highly efficient cooler of new design



## **CHARACTERISTICS**

Plate Dissipation (Max.) 20,000 Watts
Screen Dissipation (Max.) 450 Watts
Grid Dissipation (Max.) 200 Watts
Frequency for Max. rating (CW) 110 MHz
Amplification Factor 6.7

Filament/Cathode Thoriated Tungsten
Voltage 10.0 Volts

Current 140 Amps

Capacitance Grounded Cathode

 $\begin{array}{lll} \text{Input} & 195 \text{ pf} \\ \text{Output} & 22.7 \text{ pf} \\ \text{Feedthrough} & 0.6 \text{ pf} \end{array}$ 

Capacitance Grounded Grid
Input 87.4 pf
Output 23.1 pf
Feedthrough .08 pf

Cooling Forced Air
Base Special, Coaxial
Air Socket - VHF SK-360, Y-291
Air Socket - dc to HF SK-320

 Length
 9.84 in; 249.90 mm

 Diameter
 7.85 in; 199.95 mm

 Weight
 15.0 lb; 6.8 kg

		MAXIMUM 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)
С	RF power amplifier	12,500	5.0	9,000	800	4.15	360	28.9
С	RF power amplifier	12,500	5.0	11,500	650	3.75	405	33.2

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

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