

The 4CX20,000A/8990 is a power tetrode intended for use in audio or radio frequency applications. It features an internal mechanical structure which results in high RF operating efficiency. Low RF losses in this structure permit operation at full ratings up to 110 MHz and at reduced ratings to 220 MHz. The 4CX20,000A/8990 has a gain over 18 dB in FM broadcast service, and is also recommended for radio frequency linear power amplifier service, and for VHF-TV linear amplifier service. The anode is rated for 20 kW of dissipation with forced air cooling and incorporates a new highly efficient cooler design, which significantly reduces air pressure and flow requirements and produces low acoustical noise.



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
Input	190 pf
Output	23.5 pf
Feedthrough	1.5 pf
Capacitance	Grounded Grid
Input	83 pf
Output	24.5 pf
Feedthrough	0.2 pf
Cooling	Forced Air
Base	Special, Coaxial
Air Socket	SK-320
Air Chimney	SK-326
Boiler	---
Length	9.5 in; 341.3 mm
Diameter	8.8 in; 223.5 mm
Weight	19.2 lb; 8.75 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	10,000	5.0	9,000	900	4.0	26.4	28.2
C	RF amplifier at 88.3 MHz	10,000	5.0	9,000	800	4.1	325	28.75
C	RF amplifier at 107.7 MHz	10,000	5.0	9,000	800	4.2	360	28.9

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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