

The 3CW20,000A7 is a high-mu power triode intended to be used as a zero bias Class B amplifier in audio or radio frequency applications. Operation with zero-grid bias offers circuit simplicity by eliminating the bias supply. In addition, grounded grid operation is attractive since a power gain as high as twenty times can be obtained. The 3CW20,000A7 is electrically identical to the air-cooled 3CX10,000A7 except for its 20kW plate dissipation rating.



## 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	7.5 Volts
Current	99.0 Amps
Capacitance	Grounded Cathode
Input	59.0 pf
Output	0.2 pf
Feedthrough	36 pf
Capacitance	Grounded Grid
Input	59.0 pf
Output	36.0 pf
Feedthrough	0.2 pf
Cooling	Water and Forced Air
Base	Coaxial
Air Socket	SK-1300
Air Chimney	---
Boiler	---
Length	11.22 in; 285.00 mm
Diameter	4.65 in; 118.10 mm
Weight	11.5 lb; 5.2 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	7,000	4.0	7,000	---	4.0	530	21.3
C	Grid driven RF amplifier plate modulated	5,500	3.0	5,000	---	3.0	380	11.9
B	Cathode driven RF linear amplifier	7,000	5.0	7,000	---	5.0	1,540	24.2
B	Cathode driven RF linear amplifier	7,000	5.0	7,000	---	2.4	330	5.65

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](http://www.cpii.com), or contact: CPI MPP Division, Eimac Operations, 607 Hansen Way, Palo Alto, CA 94303  
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