

The 4CM400,000A is a water vapor cooled power tetrode designed for very high power broadcast service to 110 MHz. The tube has a thoriated-tungsten mesh filament mounted on water cooled supports. Maximum anode dissipation is 400 kilowatts steady state. Large diameter coaxial terminals are used for the control grid and the RF filament terminals. Filament power and filament support cooling water connections are made through special couplings with threaded clamping rings.



## CHARACTERISTICS

Plate Dissipation (Max.)	400,000 Watts
Screen Dissipation (Max.)	7,500 Watts
Grid Dissipation (Max.)	2,000 Watts
Frequency for Max. rating (CW)	110 MHz
Amplification Factor	4.5
Filament/Cathode	Thoriated Tungsten
Voltage	16.3 Volts
Current	600 Amps
Capacitance	Grounded Cathode
Input	1000 pf
Output	165 pf
Feedthrough	5.0 pf
Capacitance	Grounded Grid
Input	450 pf
Output	165 pf
Feedthrough	0.7 pf
Cooling	Vapor and Water
Base	Special Coaxial
Air Socket	---
Air Chimney	---
Boiler	---
Length	18.25 in; 46.36 cm
Diameter	17.03 in; 43.26 cm
Weight	170 lb; 77.3 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	22,500	65.0	21,000	1,500	59	2,700	1,025.0
C	RF amplifier plate modulated	17,500	50.0	17,500	800	50	2,400	700.0
AB1	RF linear amplifier	22,500	65.0	20,000	1,500	45	---	610.0
AB1	AF amplifier or modulator	22,500	65.0	17,500	1,500	78	---	950.0

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.



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