

The 4CM300,000GA is a ceramic/metal, multi-phase-cooled (water/vapor) power tetrode designed to be used as an exact replacement for the Thomson TH537. This tube has a thoriated tungsten mesh filament and pyrolytic graphite control and screen grids for applications requiring high dissipation combined with low secondary emission characteristics. Base coaxial contact rings are provided for the filament, grid, and screen terminals, and these terminals are cooled with forced air. The maximum anode dissipation rating is 500 kilowatts steady state, with multiphase cooling.



## CHARACTERISTICS

Plate Dissipation (Max.)	300,000 Watts
Screen Dissipation (Max.)	5,000 Watts
Grid Dissipation (Max.)	2,000 Watts
Frequency for Max. rating (CW)	50 MHz
Amplification Factor	4.3
Filament/Cathode	Thoriated Tungsten
Voltage	18.0 Volts
Current	430 Amps
Capacitance	Grounded Cathode
Input	820 pf
Output	80.0 pf
Feedthrough	4.5 pf
Capacitance	Grounded Grid
Input	340 pf
Output	81.0 pf
Feedthrough	0.8 pf
Cooling	Water and Forced Air
Base	Special Coaxial
Air Socket	SK-2453
Air Chimney	N/A
Boiler	N/A
Length	22.0 in; 56.0 cm
Diameter	12.30 in; 31.1 cm
Weight	125 lb; 57 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 Plate Modulated	13,000	50.0	11,000	1,000	36.0	2,400	300.0

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.



**For information** on this and other CPI MPP products, visit our website at: [www.cpii.com](http://www.cpii.com), or contact: CPI Microwave Products Division, Eimac Operation, 607 Hansen Way, Palo Alto, CA 94303  
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