

## **TECHNICAL DATA**

## 3CW5000A7 3CW5000F7

HIGH-MU WATER-COOLED POWER TRIODES

The EIMAC 3CW5000A7 and 3CW5000F7 are ceramic/metal, water-cooled, high-mu triodes for use as an amplifier, oscillator, or modulator, or in voltage regulator applications. Their maximum rated anode dissipation is 5000 watts.

These tubes are water-cooled versions of the air-cooled 3CX3000A7 and 3CX3000F7.

The 3CW5000A7 sockets coaxially and has a low-inductance cylindrical filament-stem structure which readily becomes part of a linear filament tank circuit for VHF operation. The 3CW5000F7 tube is identical except for the addition of flexible leads on the base for grid and filament connections, which can simplify socketing in low-frequency operations.

Operation with zero grid bias in many applications offers circuit simplicity by eliminating the bias supply. Grounded-grid operation is attractive since a power gain of over 20 times can be obtained.





## GENERAL CHARACTERISTICS<sup>1</sup>

## **ELECTRICAL**

Filament: Thoriated-tungsten		
Voltage 7.5 ±	0.37	V
Current @ 7.5 V	51.5	A
Amplification Factor (Average)	160	
Direct Interelectrode Capacitances (grounded filament) <sup>2</sup>		
Cin	38.0	pF
Cout	0.6	pF
Cgp	24.0	pF
Direct Interelectrode Capacitances (grounded grid) <sup>2</sup>		
Cin	38.0	pF
Cout	24.0	pF
Cpk	0.6	рF

- Characteristics and operating values are based on performance tests. These figures may change without notice as the result of additional data or product refinement. EIMAC Division of Varian should be consulted before using this information for final equipment design.
- 2. Capacitance values are for a cold tube as measured in a special shielded fixture, in accordance with Electronic Industries Association Standard RS-191.