

# 3CW7000F7/YU-106

The 3CW7000F7/YU-106 is a ceramic/metal, water cooled, high-mu triode intended for use as an amplifier, oscillator, or modulator, or in voltage regulator applications. Its maximum rated anode dissipation is 7000 watts. The 3CW7000F7/YU-106 is a water-cooled version of the air cooled 3CX3000F7, and 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.



## CHARACTERISTICS

Plate Dissipation (Max.)	7,000 Watts
Screen Dissipation (Max.)	---
Grid Dissipation (Max.)	225 Watts
Frequency for Max. rating (CW)	75 MHz
Amplification Factor	160
Filament/Cathode	Thoriated Tungsten
Voltage	7.5 Volts
Current	51.5 Amps
Capacitance	Grounded Cathode
Input	38.0 pf
Output	0.6 pf
Feedthrough	24 pf
Capacitance	---
Input	--- pf
Output	--- pf
Feedthrough	--- pf
Cooling	Water and Forced Air
Base	Flexible Filament
Air Socket	---
Air Chimney	---
Boiler	---
Length	12.56 in; 31.9 mm
Diameter	3.63 in; 9.22 cm
Weight	4.1 lb; 1.9 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 industrial oscillator or amplifier	5,000	2.5	4,800	---	1.5	435	5.5

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  
**TELEPHONE:** 1(800) 414-8823. **FAX:** (650) 592-9988 | **EMAIL:** [powergrid@cpii.com](mailto:powergrid@cpii.com)