

The 3CX3000F7/8162 high- $\mu$  forced air cooled power triode provides relatively high power output as an amplifier, oscillator, or modulator at low plate voltages. The tube has a low inductance cylindrical filament tank circuit for VHF operation. 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 twenty times can be obtained. The 3CX3000F7/8162 tube is identical to the 3CX3000A7 except for the addition of flexible leads on the base for grid and filament connections which can simplify socketing in low frequency applications



## CHARACTERISTICS

Plate Dissipation (Max.)	4,000 Watts
Screen Dissipation (Max.)	---
Grid Dissipation (Max.)	225 Watts
Frequency for Max. rating (CW)	30 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	Grounded Grid
Input	38 pf
Output	24.0 pf
Feedthrough	0.6 pf
Cooling	Forced Air
Base	Special with Flying leads
Air Socket	---
Air Chimney	---
Boiler	---
Length	18.437 in; 468.30 mm
Diameter	4.15 in; 105.50 mm
Weight	7.0 lb; 3.2 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	Cathode Driven RF amplifier	5,000	2.5	4,800	---	1.5	435	5.5
AB2	RF Linear Amplifier	5,000	2.5	4,800	---	2.0	410	7.26
AB2	Grid Driven RF Linear Amplifier AM Service	5,000	2.5	4,000	---	0.74	115	1.13
AB2	Grid Driven AF Amplifier or Modulator	5,000	2.5	4,000	---	3.6	115	10.5
D	Switching Modulator	15,000	2.5	13,700	---	0.53	---	---

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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