



The 4CW50,000E is characterized by low input and feedback capacitances and low internal lead inductances. A rugged mesh thoriated tungsten filament provides adequate emission over the long operating life. It is recommended for use as a Class C RF amplifier or oscillator, a Class AB RF linear amplifier, or a Class AB push-pull AF amplifier or modulator. The 4CW50,000E is also useful as a plate and screen-modulated Class C RF amplifier.



## 4CW50,000E

## **CHARACTERISTICS**

Plate Dissipation (Max.) 50,000 Watts
Screen Dissipation (Max.) 1,500 Watts
Grid Dissipation (Max.) 400 Watts
Frequency for Max. rating (CW) 110 MHz
Amplification Factor 4.5

Filament/Cathode Thoriated Tungsten

Voltage 12.0 Volts Current 215 Amps

Capacitance Grounded Cathode

 $\begin{array}{lll} \text{Input} & 310 \text{ pf} \\ \text{Output} & 52.0 \text{ pf} \\ \text{Feedthrough} & 0.7 \text{ pf} \end{array}$ 

Capacitance Grounded Grid
Input 140 pf
Output 52.0 pf

Feedthrough 0.3 pf
Cooling Water and Forced Air
Base Special Coaxial
Air Socket SK-2011A
Air Chimney ---

 Boiler
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 Length
 11.50 in; 292.00 mm

 Diameter
 9.53 in; 242.00 mm

 Weight
 35.0 lb; 15.9 kg

	MAXIMUM RATINGS			TYPICAL OPERATION				
Class of Operation	Type of Service	Plate Voltage (Volts)	Plate Current (Amps)	Plate Voltage (Volts)	Screen Voltage (Volts)	Plate Current (Amps)	Drive Power (Watts)	Output Power (kiloWatts)
С	RF amplifier	17,500	12.0	15,000	1,500	11.5	150	137.0
С	RF amplifier plate modulated	15,000	12.0	14,000	750	9.2	685	110.0
AB1	RF linear amplifier	17,500	12.0	10,000	1,800	9.1		57.0
AB1	AF linear amplifier	17,500	12.0	15,000	1,250	18.6		195.0

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 products, visit our website at: www.cpii.com, or contact: CPI MPP Division, Eimac Operations, 607 Hansen Way, Palo Alto, CA 94303

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