



The 4CV50,000E is characterized by low input and feedback capacitances and low internal lead inductances. A rugged thoriated tungsten mesh filament provides adequate emission over 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 4CV50,000E is also useful as a plate and screen modulated Class C RF amplifier.



4CV50,000E

CHARACTERISTICS

Plate Dissipation (Max.) Screen Dissipation (Max.) Grid Dissipation (Max.) Frequency for Max. rating (CW) **Amplification Factor** Filament/Cathode Voltage Current Capacitance Input Output Feedthrough Capacitance Input Output Feedthrough Cooling Base Air Socket Air Chimney Boiler Length Diameter Weight

50.000 Watts 1.500 Watts 400 Watts 110 MHz 4.5 **Thoriated Tungsten** 12.0 Volts 215 Amps Grounded Cathode 310.0 pf 52.0 pf 0.7 pf ____ --- pf --- pf --- pf Vapor and Forced Air Special SK-2011A ---**BR-710A** 11.50 in; 292.10 mm 9.53 in; 242.00 mm 31.5 lb; 14.3 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)
C	RF amplifier	17,500	12.0	15,000	1,500	11.5	150	137.0
C	RF amplifier plate modulated	15,000	12.0	14,000	750	9.25	685	110.0
AB1	RF linear amplifier	17,500	12.0	10,000	1,800	9.14		57.0
AB1	AF amplifier or modulator (2 tubes)	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 **TELEPHONE:** 1(800) 414-8823. **FAX:** (650) 592-9988 | **EMAIL:** powergrid@cpii.com