Communications & Power Industries

4CX3000A/8169

The 4CX3000A/8169 is designed to be used as a Class AB1 linear amplifier in audio or radio frequency applications. Its characteristic of low intermodulation distortion makes it especially suitable for single sideband service. This tube is unique in that a production test is included to insure minimum distortion products. The 4CX3000A/8169 must produce a minimum of 5300 watts in Class AB1 service with 3rd order IM distortion at least 32 dB down, from one tone of two-tone signal. The tube is also recommended for use as a Class C radio frequency power amplifier and plate-modulated, radio frequency power amplifier.



CHARACTERISTICS

Plate Dissipation (Max.)	3,500 Watts
Screen Dissipation (Max.)	175 Watts
Grid Dissipation (Max.)	50 Watts
Frequency for Max. rating (CW)	150 MHz
Amplification Factor	5.5
Filament/Cathode	Thoriated Tungsten
Voltage	9.0 Volts
Current	41.5 Amps
Capacitance	Grounded Cathode
Input	-130 pf
Output	12.5 pf
Feedthrough	1.0 pf
Capacitance	Grounded Grid
Input	61.0 pf
Output	12.5 pf
Feedthrough	0.1 pf
Cooling	Forced Air
Base	Special, Breechblock
Air Socket	SK-1400
Air Chimney	SK-1406
Boiler	---
Length	7.90 in; 200.70 mm
Diameter	4.63 in; 117.60 mm
Weight	5.5 lb; 2.5 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 at 30 MHz	7,000	2.0	7,000	500	1.9	41	11.00
C	AF amplifier plate modulated at 30 MHz	5,000	1.4	5,000	500	1.4	31	5.75
AB	RF linear amplifier	7,000	2.0	5,000	850	1.7	---	5.3
AB	AF amplifier or modulator	6,000	2.0	6,000	850	3.1	---	12.4

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.

ISO 9001

For information on this and other CPI products, visit our website at: **www.cpii.com**, or contact: CPI MPP Division, Eimac Operation, 607 Hansen Way, Palo Alto, CA 94303
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