



ELECTRONIC TUBE REFERENCE

4CV75000A

Power - Tetrode (NOT beam) (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
TETRODE

High-power ceramic/metal transmitting tetrode designed for RF power amplification, linear amplification, oscillation, modulation, broadcast, or related high-power service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	10 V / 300 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Tetrode	
AMPLIFICATION FACTOR	4.5
MAXIMUM PLATE VOLTAGE	16000 V
MAXIMUM SCREEN VOLTAGE	2500 V
MAXIMUM PLATE DISSIPATION	75000 W
MAXIMUM SCREEN DISSIPATION	1750 W
MAXIMUM GRID DISSIPATION	500 W
MAXIMUM CATHODE CURRENT	12 A
<i>Published absolute maximum ratings promoted from the applicable service tables; pulse-service maxima are used only where explicitly noted in the tube note.</i>	

Ceramic/metal vapor-cooled power tetrode for 50–80 kW output service, recommended for Class-C RF, Class-AB RF linear, and push-pull AF amplifier/modulator applications.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 Eimac

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1962 EIMAC

Section 1 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/Filament Voltage	10 V	—
Heater/Filament Current	300 A	At 10.0 V nominal
Frequency for Maximum Ratings	30 MHz	—
Maximum Plate Voltage	16000 V	Highest published applicable absolute maximum
Maximum Screen Voltage	2500 V	Highest published applicable absolute maximum
Maximum Plate Dissipation	75000 W	—
Maximum Screen Dissipation	1750 W	—
Maximum Grid Dissipation	500 W	—
Maximum DC Plate Current	15 A	—
Plate Voltage	15000 V	ClassAB;RFLinearAmplifier;HighOperatingPoint
Screen Voltage	1500 V	ClassAB;RFLinearAmplifier
Plate Output Power	82500 W	ClassAB;RFLinearAmplifier;HighOperatingPoint

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Screen Amplification Factor	4.5	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input Capacitance	440 pF	GroundedFilament
Output Capacitance	55 pF	GroundedFilament
Feedback Capacitance	2.3 pF	GroundedFilament
Input Capacitance	175 pF	GroundedGrid

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output Capacitance	57 pF	GroundedGrid
Feedback Capacitance	0.4 pF	GroundedGrid



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Eimac Tube Manual

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1965 EIMAC TUBE MANUAL

Section 1 · Tetrode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/Filament Voltage	10 V	—
Heater/Filament Current	300 A	—
Amplification Factor	4.5	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum DC Plate Voltage	15000 V	—
Maximum DC Screen Voltage	2500 V	—
Maximum Plate/Cathode Current	12 A	—
Maximum Plate Dissipation	75000 W	—
Maximum Screen Dissipation	1750 W	—
Maximum Grid Dissipation	500 W	—
Frequency for Maximum Ratings	30 MHz	—
Typical Plate Output Power	55 W	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cooling	Vapor and forced air	—