



ELECTRONIC TUBE REFERENCE

X2099

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

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
TETRODE

Quick-heating air-cooled ceramic-metal transmitting tetrode intended for push-to-talk mobile and airborne RF equipment. Rapid cathode readiness permits intermittent heater operation, while roughly 500 W plate dissipation and kilovolt plate ratings support substantial transmitter output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	25 V / 10.5 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Tetrode	
MAXIMUM PLATE VOLTAGE	2600 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	500 W
MAXIMUM CATHODE CURRENT	455 mA
<i>Promoted from printed general-characteristics and maximum-ratings/operating data.</i>	

The EIMAC X2099 is a quick-heat air-cooled ceramic/metal tetrode for push-to-talk mobile and airborne 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
Maximum plate voltage	2600 V	—
Maximum screen voltage	250 V	—
Maximum plate dissipation	500 W	—
Maximum cathode/plate current	455 mA	—

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
up to [1]	70 A	up to 70% peak current or 50% RF power output jn 250 milliseconds.
up to [2]	50 A	up to 70% peak current or 50% RF power output jn 250 milliseconds.
up to [3]	250 A	up to 70% peak current or 50% RF power output jn 250 milliseconds.
plate dissipation of	500 W	plate dissipation of 500 watts. The tube is air cooled, ceramic-metal

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage, nominal (see curves)	2.5 V	Voltage, nominal (see curves) 2.5V
Current, nominal (Inrush current approximately twice operating current)	10.5 mA	Current, nominal (Inrush current approximately twice operating current) 10.5 A
Input	56	Input..... 56.0 pF
Output	6.1	Output..... 6.1 pF
Input	33	Input..... 33.0 pF
Output	6.2	Output..... 6.2 pF`
Ceramic-to-Metal seals	250	Ceramic-to-Metal seals 250OC
Anode core	2500	Anode core 2500c
PEPorcwplateoutputpower [1]	400 W	PEPorcwplateoutputpower . . . 400 500W
PEPorcwplateoutputpower [2]	500 W	PEPorcwplateoutputpower . . . 400 500W
Zerosignalplatecurrent [1]	250 mA	Zerosignalplatecurrent 250 225mA Filamentcurrent . . a . . . ® 10.0 10.0 A
Zerosignalplatecurrent [2]	225 mA	Zerosignalplatecurrent 250 225mA Filamentcurrent . . a . . . ® 10.0 10.0 A
Zerosignalplatecurrent [3]	10 mA	Zerosignalplatecurrent 250 225mA Filamentcurrent . . a . . . ® 10.0 10.0 A
Zerosignalplatecurrent [4]	10 mA	Zerosignalplatecurrent 250 225mA Filamentcurrent . . a . . . ® 10.0 10.0 A
MaxsignalDCplatecurrent [1]	455 mA	MaxsignalDCplatecurrent . . . 455 37.OmA Warm up time to half power 250 250 ms
MaxsignalDCplatecurrent [2]	37 mA	MaxsignalDCplatecurrent . . . 455 37.OmA Warm up time to half power 250 250 ms
MaxsignalDCplatecurrent [3]	250 mA	MaxsignalDCplatecurrent . . . 455 37.OmA Warm up time to half power 250 250 ms
MaxsignalDCplatecurrent [4]	250 mA	MaxsignalDCplatecurrent . . . 455 37.OmA Warm up time to half power 250 250 ms
PINS I,	357	PINS I,3,5,7 -CONTROL GRID
PINS	2468	PINS 2,4,6,8 -HEATER CATHODE DIMENSIONAL DATA

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

