



ELECTRONIC TUBE REFERENCE

8940

Power - Triode (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Rugged ceramic-metal planar triode for CW and pulsed RF amplification, frequency multiplication, modulation, and series-regulator service. Its very high transconductance and 6.5 kV capability provide high gain across unusually diverse power applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 2.25 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
TRANSCONDUCTANCE	0.1 S
AMPLIFICATION FACTOR	65
MAXIMUM PLATE VOLTAGE	6500 V
MAXIMUM PLATE DISSIPATION	750 W
MAXIMUM GRID DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	16 A
<i>Promoted from printed general-characteristics and absolute-maximum-ratings blocks.</i>	

The EIMAC 8940 is a rugged ceramic/metal planar triode for cw and pulsed rf, multiplier, modulator, and series-regulator service.



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 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	65	—
Transconductance	100000 μ S	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum DC plate voltage	4000 V	—
Maximum plate dissipation	750 W	—
Maximum grid dissipation	2 W	—
Maximum pulse cathode current	16 A	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1975 Eimac Tube Manual

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

1975 EIMAC TUBE MANUAL

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage nominal	6.3 V	—
Heater current nominal	2.25 A	—
Transconductance	100000 μ S	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	65	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input/grid-cathode capacitance	16 pF	—
Output/plate-cathode capacitance	0.11 pF	—
Grid-plate/feedback capacitance	3.8 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	6500 V	—
Maximum plate dissipation	750 W	—
Maximum grid dissipation	2 W	—
Maximum cathode or pulse plate current	16 A	—
Maximum rated frequency	2.5 GHz	—
Grid-pulsed DC plate voltage	4000 V	GridPulsed
Plate-pulsed peak plate voltage	6500 V	PlatePulsed
Pulse plate current	12 A	—
Pulse grid current	4 A	—
Pulse duration	6 us	—
Duty factor	0.0033	—
Representative peak video plate current	6 A	PlatePulsedOscillator
Representative useful output	10000 W	PlatePulsedOscillator
CW maximum rated frequency	2 GHz	CW



SOURCE DATA APPENDIX

1976 Eimac Tube Manual

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

1976 EIMAC TUBE MANUAL

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage nominal	6.3 V	—
Heater current nominal	2.25 A	—
Transconductance	100000 μ S	—
Amplification factor	65	—

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PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
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Maximum plate dissipation	750 W	—
Maximum grid dissipation	2 W	—
Maximum cathode or pulse plate current	16 A	—
Maximum rated frequency	2.5 GHz	—
Grid-pulsed DC plate voltage	4000 V	GridPulsed
Plate-pulsed peak plate voltage	6500 V	PlatePulsed
Pulse plate current	12 A	—
Pulse grid current	4 A	—
Pulse duration	6 μ s	—
Duty factor	0.0033	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Representative peak video plate current	6 A	PlatePulsedOscillator
Representative useful output	10000 W	PlatePulsedOscillator
CW maximum rated frequency	2 GHz	CW