ELECTRONIC TUBE REFERENCE

Y690

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

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRIODE

Specially processed 8941-family planar triode for series-regulator, switch, and pulse-modulator service, with 750-watt plate dissipation.

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

SECTION1 Triode

TRANSCONDUCTANCE	0.1 S
AMPLIFICATION FACTOR	200
MAXIMUM PLATE VOLTAGE	10000 V
MAXIMUM PLATE DISSIPATION	750 W
MAXIMUM GRID DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	750 mA

Promoted from printed general-characteristics and absolute-maximum-ratings blocks.

The EIMAC Y690 is a specially processed 8941-family planar triode for series-regulator, switch, and pulse-modulator service.

SOURCE OPERATING CONDITIONS

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	**200**	—
Transconductance	**100000 uS**	—

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Maximum DC plate voltage	**10000 V**	—
Maximum plate dissipation	**750 W**	—
Maximum grid dissipation	**2 W**	—
Maximum pulse cathode current	**16 A**	—

SOURCE DATA APPENDIX

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	**75000 uS**	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	**200**	—
Cut-off mu	**90**	PulseModulator

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input/grid-cathode capacitance	**14 pF**	—
Output/plate-cathode capacitance	**0.11 pF**	—
Grid-plate/feedback capacitance	**2.5 pF**	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	**18000 V**	—
Maximum plate dissipation	**750 W**	—
Maximum grid dissipation	**2 W**	—
Maximum cathode or pulse plate current	**16 A**	—
Maximum rated frequency	**2 GHz**	—
Pulse-modulator DC plate voltage	**15000 V**	PulseModulator
Pulse-modulator peak plate voltage	**18000 V**	PulseModulator
Pulse cathode current	**16 A**	PulseModulator
DC plate current	**600 mA**	PulseModulator
Pulse duration	**6 us**	PulseModulator
Duty factor	**0.0033**	PulseModulator

SOURCE OPERATING CONDITIONS

SOURCE PDF

1976 Eimac Tube Manual

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

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Heater voltage nominal	**6.3 V**	—
Heater current nominal	**2.25 A**	—
Transconductance	**75000 uS**	—
Amplification factor	**200**	—
Cut-off mu	**90**	PulseModulator

CAPACITANCE		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Input/grid-cathode capacitance	**14 pF**	—
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OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Maximum plate voltage	**18000 V**	—
Maximum plate dissipation	**750 W**	—
Maximum grid dissipation	**2 W**	—
Maximum cathode or pulse plate current	**16 A**	—
Maximum rated frequency	**2 GHz**	—
Pulse-modulator DC plate voltage	**15000 V**	PulseModulator
Pulse-modulator peak plate voltage	**18000 V**	PulseModulator
Pulse cathode current	**16 A**	PulseModulator
DC plate current	**600 mA**	PulseModulator
Pulse duration	**6 us**	PulseModulator
Duty factor	**0.0033**	PulseModulator

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

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