



ELECTRONIC TUBE REFERENCE

Y581

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Forced-air-cooled rugged planar triode, former 8907 designation, for CW/pulsed oscillator, multiplier, modulator, and regulator service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6 V / 1 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
TRANSCONDUCTANCE	0.038 S
AMPLIFICATION FACTOR	80
MAXIMUM PLATE VOLTAGE	3500 V
MAXIMUM PLATE DISSIPATION	100 W
MAXIMUM GRID DISSIPATION	1.5 W
MAXIMUM CATHODE CURRENT	7.5 A
<i>Promoted values are taken from printed General Characteristics / Maximum Ratings. Additional published conditions and operating data are preserved in parameters.</i>	

EIMAC Y581 is explicitly identified as the former designation of 8907. Forced-air-cooled rugged planar triode for CW or pulsed oscillator, multiplier, modulator, and regulator 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

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Cathode Capacitance	8 pF	—
Grid-Plate Capacitance	1.98 pF	—
Plate-Cathode Capacitance	0.06 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency CW Maximum	2.5 GHz	—
Peak Pulse Plate Voltage	4500 V	—
Pulse Plate Current	5 A	—



SOURCE OPERATING CONDITIONS

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 V	—
Heater current nominal	1 A	—
Transconductance	38000 μ S	—
Amplification factor	80	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input/grid-cathode capacitance	8 pF	—
Output/plate-cathode capacitance	1.98 pF	—
Grid-plate/feedback capacitance	0.06 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	4500 V	—
Maximum plate dissipation	100 W	—
Maximum grid dissipation	1.5 W	—
Maximum cathode or pulse plate current	7.5 A	—
Maximum rated frequency	3 GHz	—
CW DC plate voltage	2500 V	CW
CW DC plate current	150 mA	CW
CW DC grid current	45 mA	CW
Forced-air plate dissipation	100 W	8907
Representative DC plate voltage	1000 V	GroundedGridCWOscillator
Representative useful CW output	30 W	GroundedGridCWOscillator
Representative frequency	2.5 GHz	GroundedGridCWOscillator
Pulse peak plate voltage	4500 V	Pulse
Pulse grid current	2.5 A	Pulse
Pulse duration	6 us	Pulse



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 V	—
Heater current nominal	1 A	—
Transconductance	38000 uS	—
Amplification factor	80	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input/grid-cathode capacitance	8 pF	—
Output/plate-cathode capacitance	1.98 pF	—
Grid-plate/feedback capacitance	0.06 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	4500 V	—
Maximum plate dissipation	100 W	—
Maximum grid dissipation	1.5 W	—
Maximum cathode or pulse plate current	7.5 A	—
Maximum rated frequency	3 GHz	—
CW DC plate voltage	2500 V	CW
CW DC plate current	150 mA	CW
CW DC grid current	45 mA	CW
Forced-air plate dissipation	100 W	8907
Representative DC plate voltage	1000 V	GroundedGridCWOscillator

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Representative useful CW output	30 W	GroundedGridCWOscillator
Representative frequency	2.5 GHz	GroundedGridCWOscillator
Pulse peak plate voltage	4500 V	Pulse
Pulse grid current	2.5 A	Pulse
Pulse duration	6 us	Pulse

TUBE TINKER

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