



ELECTRONIC TUBE REFERENCE

450TH

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

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

Directly heated transmitting power triode intended for RF amplifier, oscillator, or modulator service. Manufacturer operating data emphasize radio-frequency power generation, substantial plate loading, and professional transmitter applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	7.5 V / 12 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
TRANSCONDUCTANCE	0.00665 S
AMPLIFICATION FACTOR	38
MAXIMUM PLATE VOLTAGE	6000 V
MAXIMUM PLATE DISSIPATION	450 W
MAXIMUM GRID DISSIPATION	65 W
Radiation-cooled high-power triode widely used in AM broadcasting, government transmitters, and RF heating.	

450TH is a Triode device in the supplied Amperex literature. Radiation-cooled high-power triode widely used in AM broadcasting, government transmitters, and RF heating. Published ratings, operating points, capacitances, pulse data, or industrial service limits were preserved in the technical output as applicable.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Amperex Industrial

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

1958 AMPEREX INDUSTRIAL

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	5000 V	RF Amplifier Or Oscillator; Class C; Telegraphy
Plate current	450 mA	RF Amplifier Or Oscillator; Class C; Telegraphy
RF output power	1800 W	RF Amplifier Or Oscillator; Class C; Telegraphy
Grid voltage	-300 V	RF Amplifier Or Oscillator; Class C; Telegraphy
Grid current	90 mA	RF Amplifier Or Oscillator; Class C; Telegraphy
Maximum frequency at full input rating	40 MHz	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	5 pF	—
Grid-to-filament/cathode capacitance	8.8 pF	—
Plate-to-filament/cathode capacitance	0.8 pF	—



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
Frequency for Maximum Ratings	40 MHz	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum DC Plate Current	600 mA	Published maximum
Typical Plate Output Power	2200 W	Class-B, two tubes, 5000 V plate

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Plate Capacitance	5 pF	Average
Grid-Filament Capacitance	8.8 pF	Average
Plate-Filament Capacitance	0.8 pF	Average