



ELECTRONIC TUBE REFERENCE

75TL

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Eimac low-mu transmitting triode for RF amplifier, oscillator, and audio modulator service. Its low-mu characteristics favor heavier grid drive and high-current operation in moderate-power professional transmitter stages.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	5 V / 6.25 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
TRANSCONDUCTANCE	0.00335 S
AMPLIFICATION FACTOR	2
MAXIMUM PLATE VOLTAGE	3000 V
MAXIMUM PLATE DISSIPATION	75 W
MAXIMUM GRID DISSIPATION	13 W
MAXIMUM CATHODE CURRENT	225 mA
<i>Promoted maximum ratings/characteristics populated from published headings; service-specific values retained in parameters.</i>	

Low-mu transmitting triode for RF amplifier, oscillator, and audio modulator service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 Eimac Tubes

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

1950 EIMAC TUBES

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Voltage	5 V	—
Filament Current	6.25 A	—
Amplification Factor	12	—
Transconductance	3350 μ S	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Plate Capacitance	2.4 pF	—
Grid-Filament Capacitance	2.6 pF	—
Plate-Filament Capacitance	0.4 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum DC Plate Voltage	3000 V	RF Class C and audio service
Maximum DC Plate Current	225 mA	RF Class C
Maximum Plate Dissipation	75 W	—
Maximum Grid Dissipation	13 W	—
Frequency Limit for Published RF Ratings	40 MHz	—
Typical RF Plate Output	225 W	Class C; 2 kV plate
Typical Audio Plate Output	350 W	Two tubes, Class B; 2 kV plate

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cooling	Radiation and air circulation	—

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
The Eimac	75	The Eimac 75TL is a low-mu, high-vacuum transmitting triode intended for amplifier, oscillator
and modulator service. It has a maximum plate dissipation rating of [1]	75 W	and modulator service. It has a maximum plate dissipation rating of 75 watts. Cooling of the 75TL is
and modulator service. It has a maximum plate dissipation rating of [2]	75 W	and modulator service. It has a maximum plate dissipation rating of 75 watts. Cooling of the 75TL is
Voltage	50 V	Voltage - - - - - 50 volts
Current	6.25 A	Current - - - - - 6.25 amperes
Amplification Factor (Average)	-2	Amplification Factor (Average)- - - - - -2
Transconductance (i, = [1]	225 uS	Transconductance (i, =225ma., E,=2500v., E,=-182v.) - 3350 umhos
Transconductance (i, = [2]	2500 uS	Transconductance (i, =225ma., E,=2500v., E,=-182v.) - 3350 umhos
Transconductance (i, = [3]	-182 uS	Transconductance (i, =225ma., E,=2500v., E,=-182v.) - 3350 umhos
Transconductance (i, = [4]	3350 uS	Transconductance (i, =225ma., E,=2500v., E,=-182v.) - 3350 umhos
D-C Plate Voltage [1]	1500 V	D-C Plate Voltage - - - - - 1500 2000 volts
D-C Plate Voltage [2]	2000 V	D-C Plate Voltage - - - - - 1500 2000 volts
MAXIMUM RATINGS (Frequencies below [1]	40 V	MAXIMUM RATINGS (Frequencies below 40 Mc.) D-C Grid Voltage! - - - - -105 —160 volts
MAXIMUM RATINGS (Frequencies below [2]	-105 V	MAXIMUM RATINGS (Frequencies below 40 Mc.) D-C Grid Voltage! - - - - -105 —160 volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MAXIMUM RATINGS (Frequencies below [3])	-160 V	MAXIMUM RATINGS (Frequencies below 40 Mc.) D-C Grid Voltage! - - - - -105 —160 volts
D-C PLATE VOLTAGE [1]	3000 V	D-C PLATE VOLTAGE - - - - - 3000 MAX. YOLTS Peak A-F Grid Input VYoltage (per tube) - 105 160 volts
D-C PLATE VOLTAGE [2]	105 V	D-C PLATE VOLTAGE - - - - - 3000 MAX. YOLTS Peak A-F Grid Input VYoltage (per tube) - 105 160 volts
D-C PLATE VOLTAGE [3]	160 V	D-C PLATE VOLTAGE - - - - - 3000 MAX. YOLTS Peak A-F Grid Input VYoltage (per tube) - 105 160 volts
D-C PLATE CURRENT [1]	225 mA	D-C PLATE CURRENT - - - - - 225 MAX. MA. Zaro-Signal D-C Plate Current - - - - &7 50 ma.
D-C PLATE CURRENT [2]	7 mA	D-C PLATE CURRENT - - - - - 225 MAX. MA. Zaro-Signal D-C Plate Current - - - - &7 50 ma.
D-C PLATE CURRENT [3]	50 mA	D-C PLATE CURRENT - - - - - 225 MAX. MA. Zaro-Signal D-C Plate Current - - - - &7 50 ma.
PLATE DIiSSIPATION [1]	75 mA	PLATE DIiSSIPATION - - - - - 75 MAX, WATTS Max-Signal D-C Plate Current - - - - 143 130 ma.
PLATE DIiSSIPATION [2]	143 mA	PLATE DIiSSIPATION - - - - - 75 MAX, WATTS Max-Signal D-C Plate Current - - - - 143 130 ma.
PLATE DIiSSIPATION [3]	130 mA	PLATE DIiSSIPATION - - - - - 75 MAX, WATTS Max-Signal D-C Plate Current - - - - 143 130 ma.
GRID DISSIPATION [1]	13 W	GRID DISSIPATION - - - - - 13 MAX. WATTS Driving Power - - - - - 0 0 watt
GRID DISSIPATION [2]	0 W	GRID DISSIPATION - - - - - 13 MAX. WATTS Driving Power - - - - - 0 0 watt
GRID DISSIPATION [3]	0 W	GRID DISSIPATION - - - - - 13 MAX. WATTS Driving Power - - - - - 0 0 watt
TYPICAL OPERATION (Frequencies below [1])	40 W	TYPICAL OPERATION (Frequencies below 40 Mc.) Max-Signal Plate Power Output - - - 64 110 watts
TYPICAL OPERATION (Frequencies below [2])	64 W	TYPICAL OPERATION (Frequencies below 40 Mc.) Max-Signal Plate Power Output - - - 64 110 watts
TYPICAL OPERATION (Frequencies below [3])	110 W	TYPICAL OPERATION (Frequencies below 40 Mc.) Max-Signal Plate Power Output - - - 64 110 watts
Max-Signal Plate Dissipation (per tube) [1]	75 W	Max-Signal Plate Dissipation (per tube) - - 75 75 watts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Max-Signal Plate Dissipation (per tube) [2]	75 W	Max-Signal Plate Dissipation (per tube) - - 75 75 watts
D-C Plate Voltage - - - - - 1000 [1]	1500 V	D-C Plate Voltage - - - - - 1000 1500 2000 volts
D-C Plate Voltage - - - - - 1000 [2]	2000 V	D-C Plate Voltage - - - - - 1000 1500 2000 volts
D-C Plate Current [1]	28 mA	D-C Plate Current - - - - - 28 167 150 ma.
D-C Plate Current [2]	167 mA	D-C Plate Current - - - - - 28 167 150 ma.
D-C Plate Current [3]	150 mA	D-C Plate Current - - - - - 28 167 150 ma.
Plate Dissipation [1]	75 W	Plate Dissipation - - - - - 75 75 75 watts AUDIO FREQUENCY POWER AMPLIFIER AND MODULATOR
Plate Dissipation [2]	75 W	Plate Dissipation - - - - - 75 75 75 watts AUDIO FREQUENCY POWER AMPLIFIER AND MODULATOR
Plate Dissipation [3]	75 W	Plate Dissipation - - - - - 75 75 75 watts AUDIO FREQUENCY POWER AMPLIFIER AND MODULATOR
D-C Grid Current [1]	28 mA	D-C Grid Current - - - - - 28 22 21 ma,
D-C Grid Current [2]	22 mA	D-C Grid Current - - - - - 28 22 21 ma,
D-C Grid Current [3]	21 mA	D-C Grid Current - - - - - 28 22 21 ma,
Peak R-F Grid Input Yoltage (approx.) [1]	320 V	Peak R-F Grid Input Yoltage (approx.) 320 355 425 volts
Peak R-F Grid Input Yoltage (approx.) [2]	355 V	Peak R-F Grid Input Yoltage (approx.) 320 355 425 volts
Peak R-F Grid Input Yoltage (approx.) [3]	425 V	Peak R-F Grid Input Yoltage (approx.) 320 355 425 volts
Driving Power, (approx.) [1]	8 V	Driving Power, (approx.) - - - - 8 [8 watts D-C PLATE YOLTAGE - - - - 3000 MAX. VOLTS
Driving Power, (approx.) [2]	8 V	Driving Power, (approx.) - - - - 8 [8 watts D-C PLATE YOLTAGE - - - - 3000 MAX. VOLTS
Driving Power, (approx.) [3]	3000 V	Driving Power, (approx.) - - - - 8 [8 watts D-C PLATE YOLTAGE - - - - 3000 MAX. VOLTS
Plate Power Input [1]	215 mA	Plate Power Input - - - - - 215 250 300 watts MAX-SIGNAL D-C PLATE CURRENT PER TUBE 225 MAX. MA.
Plate Power Input [2]	250 mA	Plate Power Input - - - - - 215 250 300 watts MAX-SIGNAL D-C PLATE CURRENT PER TUBE 225 MAX. MA.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Power Input [3]	300 mA	Plate Power Input - - - - 215 250 300 watts MAX-SIGNAL D-C PLATE CURRENT PER TUBE 225 MAX. MA.
Plate Power Input [4]	225 mA	Plate Power Input - - - - 215 250 300 watts MAX-SIGNAL D-C PLATE CURRENT PER TUBE 225 MAX. MA.
Plate Power Output [1]	140 W	Plate Power Output - - - - 140 175 225 watts PLATE DISSIPATION, PER TUBE - - - 75 MAX. WATTS
Plate Power Output [2]	175 W	Plate Power Output - - - - 140 175 225 watts PLATE DISSIPATION, PER TUBE - - - 75 MAX. WATTS
Plate Power Output [3]	225 W	Plate Power Output - - - - 140 175 225 watts PLATE DISSIPATION, PER TUBE - - - 75 MAX. WATTS
Plate Power Output [4]	75 W	Plate Power Output - - - - 140 175 225 watts PLATE DISSIPATION, PER TUBE - - - 75 MAX. WATTS
GRID DISSIPATION, PER TUBE	13 W	GRID DISSIPATION, PER TUBE - - - - 13 MAX. WATTS
MAXIMUM RATINGS Peak A-F Grid Input Voltage (per tube) [1]	205 V	MAXIMUM RATINGS Peak A-F Grid Input Voltage (per tube) 205 225 267 volts
MAXIMUM RATINGS Peak A-F Grid Input Voltage (per tube) [2]	225 V	MAXIMUM RATINGS Peak A-F Grid Input Voltage (per tube) 205 225 267 volts
MAXIMUM RATINGS Peak A-F Grid Input Voltage (per tube) [3]	267 V	MAXIMUM RATINGS Peak A-F Grid Input Voltage (per tube) 205 225 267 volts
Zero-Signal D-C Plate Current [1]	100 mA	Zero-Signal D-C Plate Current - - - 100 67 50 ma.
Zero-Signal D-C Plate Current [2]	67 mA	Zero-Signal D-C Plate Current - - - 100 67 50 ma.
Zero-Signal D-C Plate Current [3]	50 mA	Zero-Signal D-C Plate Current - - - 100 67 50 ma.
D-C PLATE YVOLTAGE [1]	3000 mA	D-C PLATE YVOLTAGE - - - - 3000 MAX. YOLTS Max-Signal D-C Plate Current - - - 350 285 250 ma.
D-C PLATE YVOLTAGE [2]	350 mA	D-C PLATE YVOLTAGE - - - - 3000 MAX. YOLTS Max-Signal D-C Plate Current - - - 350 285 250 ma.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
D-C PLATE YVOLTAGE [3]	285 mA	D-C PLATE YVOLTAGE - - - - 3000 MAX. YOLTS Max-Signal D-C Plate Current - - - 350 285 250 ma.
D-C PLATE YVOLTAGE [4]	250 mA	D-C PLATE YVOLTAGE - - - - 3000 MAX. YOLTS Max-Signal D-C Plate Current - - - 350 285 250 ma.
MAX-SIGNAL D-C PLATE CURRENT PERTUBE [1]	225 mA	MAX-SIGNAL D-C PLATE CURRENT PERTUBE - 225 MAX. MA. Max-Signal Avg. Driving Power {approx.) 7 3 11 watts
MAX-SIGNAL D-C PLATE CURRENT PERTUBE [2]	7 mA	MAX-SIGNAL D-C PLATE CURRENT PERTUBE - 225 MAX. MA. Max-Signal Avg. Driving Power {approx.) 7 3 11 watts
MAX-SIGNAL D-C PLATE CURRENT PERTUBE [3]	3 mA	MAX-SIGNAL D-C PLATE CURRENT PERTUBE - 225 MAX. MA. Max-Signal Avg. Driving Power {approx.) 7 3 11 watts
MAX-SIGNAL D-C PLATE CURRENT PERTUBE [4]	11 mA	MAX-SIGNAL D-C PLATE CURRENT PERTUBE - 225 MAX. MA. Max-Signal Avg. Driving Power {approx.) 7 3 11 watts
PLATE DISSIPATION, PER TUBE [1]	75 W	PLATE DISSIPATION, PER TUBE - - 75 MAX. WATTS Max-Signal Peak Driving Power - - 26 23 19 watts
PLATE DISSIPATION, PER TUBE [2]	26 W	PLATE DISSIPATION, PER TUBE - - 75 MAX. WATTS Max-Signal Peak Driving Power - - 26 23 19 watts
PLATE DISSIPATION, PER TUBE [3]	23 W	PLATE DISSIPATION, PER TUBE - - 75 MAX. WATTS Max-Signal Peak Driving Power - - 26 23 19 watts
PLATE DISSIPATION, PER TUBE [4]	19 W	PLATE DISSIPATION, PER TUBE - - 75 MAX. WATTS Max-Signal Peak Driving Power - - 26 23 19 watts
Max-Signal Plate Power Output [1]	200 W	Max-Signal Plate Power Output - - 200 280 350 watts
Max-Signal Plate Power Output [2]	280 W	Max-Signal Plate Power Output - - 200 280 350 watts
Max-Signal Plate Power Output [3]	350 W	Max-Signal Plate Power Output - - 200 280 350 watts



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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Plate Capacitance	2.4 pF	—
Grid-Filament Capacitance	2.6 pF	—
Plate-Filament Capacitance	0.4 pF	—
Frequency Maximum	40 MHz	—
Typical Class-C Output Power	225 W	—
Typical Two-Tube Modulator Output Power	350 W	—