

ELECTRONIC TUBE REFERENCE

417A

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

Frame-grid single triode designed especially for low-noise intermediate-frequency amplification, providing high transconductance for sensitive receiver stages.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9V	BASE PINS	9
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9V - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – P	A	P – Plate (Anode)	CONNECTED
PIN3 – H	–	H – Heater	CONNECTED
PIN4 – G1	A	G1 – Control Grid	CONNECTED
PIN5 – G1	A	G1 – Control Grid	CONNECTED
PIN6 – K	A	K – Cathode	CONNECTED
PIN7 – G1	A	G1 – Control Grid	CONNECTED
PIN8 – G1	A	G1 – Control Grid	CONNECTED
PIN9 – H	–	H – Heater	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	1850 Ω
TRANSCONDUCTANCE	0.02 S
AMPLIFICATION FACTOR	44
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	4.5 W
MAXIMUM CATHODE CURRENT	40 mA
<i>Promoted fields mapped from printed maximum-rating and characteristic headings; additional published values preserved in parameter rows.</i>	

Frame-grid single triode designed especially for low-noise intermediate-frequency amplification.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Ericsson Longlife

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

1965 ERICSSON LONGLIFE

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate supply voltage	130 V	ClassA
Grid supply voltage	9 V	ClassA
Cathode bias resistor	360 0hm	ClassA
Plate current	27 mA	ClassA
Plate supply voltage	150 V	ClassA
Cathode bias resistor	60 0hm	ClassA
Plate current	25 mA	ClassA
Transconductance minimum	20000 uS	—
Transconductance maximum	30000 uS	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	27000 uS	ClassA;Va=130V
Amplification factor	44 ratio	ClassA;Va=130V
Plate resistance	1600 0hm	ClassA;Va=130V
Transconductance	25000 uS	ClassA;Va=150V
Amplification factor	43 ratio	ClassA;Va=150V
Plate resistance	1700 0hm	ClassA;Va=150V
Equivalent noise resistance	100 0hm	—

1971 RCA HB3 Binder 3 of 7

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

1971 RCA HB3 BINDER 3 OF 7

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	—200 V	—
Maximum plate dissipation	—4.5 W	—
Maximum cathode current	—38 mA	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	1700 Ω	—
Transconductance	25000 μS	—
Amplification factor	43	—
Plate supply voltage	130 V	ClassA
Plate supply voltage	150 V	ClassA
Amplification factor	43	ClassA
Plate resistance	1600 Ω	ClassA
Plate resistance	1700 Ω	ClassA
Transconductance	27000 μS	ClassA
Transconductance	25000 μS	ClassA
Plate current	27 mA	ClassA
Plate current	25 mA	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate to cathode and heater	0.55 pF	—



SOURCE DATA APPENDIX

2026 Western Electric 400s

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

2026 WESTERN ELECTRIC 400S

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 volts	Heater Voltage . 6.3 volts
Heater Current	300 milliamperes	Heater Current 300 milliamperes
Plate Voltage	200 volts	Plate Voltage- 200 volts
Cathode Current	40 milliamperes	Cathode Current- 40 milliamperes
Heater Cathode voltage	55 volts	Heater Cathode voltage- 55 volts
Bulb Temperature	130 centigrade	Bulb Temperature 130° centigrade
Plate Supply Voltage	130 volts	Plate Supply Voltage. 130 150 volts
Plate Current	23 milliamperes	Plate Current . 23.0 22.5 milliamperes
Plate Resistance	1850 ohms	Plate Resistance 1850 1700 ohms
Transconductance	20000 micromhos	Transconductance 20000 25000 micromhos

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate voltage	200 volts	Maximum Plate voltage 200 volts
Plate Dissipation	-4.5 watts	Plate Dissipation - 4.5 watts

TUBE TINKER

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