

ELECTRONIC TUBE REFERENCE

1E3

Voltage - Triode (single high frequency) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

Directly heated high-frequency medium-mu triode for Class A amplification in receiving and general small-signal electronic circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9BG	BASE PINS	9
NOMINAL HEATER	1.25 V / 220 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9BG - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – P	A	P – Plate (Anode)	CONNECTED
PIN3 – G1	A	G1 – Control Grid	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – H	–	H – Heater	CONNECTED
PIN6 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN6 – K	A	K – Cathode	CONNECTED
PIN7 – G1	A	G1 – Control Grid	CONNECTED
PIN8 – G2	A	G2 – Screen Grid	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	3500 Ω
TRANSCONDUCTANCE	0.004 S
AMPLIFICATION FACTOR	14
MAXIMUM PLATE VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	3 W
MAXIMUM CATHODE CURRENT	20 mA
<i>Values promoted only where clearly published for this section in the approved source.</i>	

Directly heated high-frequency medium-mu triode for Class A amplification.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 National Union

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

1938 NATIONAL UNION

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage	1.25 volts	Published source value; see source line context.
Plate voltage max	150 volts	Published source value; see source line context.
Plate dissipation max	3 watts	Published source value; see source line context.
Cathode current max	20 V	Published source value; see source line context.
Grid voltage when grid current max. =	0.2 volt	Published source value; see source line context.
Filament voltage max	1.55 volts	Published source value; see source line context.
Grid voltage	-3.5 volts	Published source value; see source line context.
Plate voltage	150 volts	Published source value; see source line context.
Frequency	470 megacycles	Published source value; see source line context.
Out put	0.45 watt	Published source value; see source line context.
the filament voltage must be at least	1.1 volts	Published source value; see source line context.
Plate voltage =	150 volts	Published source value; see source line context.

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament current	0.22 amp	Published source value; see source line context.
Grid current max	5 ma	Published source value; see source line context.
Grid circuit resistance	1 megohm	Published source value; see source line context.
Plate current	20 ma	Published source value; see source line context.
Cathode current	20 ma	Published source value; see source line context.
Grid current	1.5 ma	Published source value; see source line context.
Cathode current =	20 amps	Published source value; see source line context.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

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195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	150 V	—
Plate voltage	150 V	ClassA
Control-grid voltage	-3.5 V	ClassA
Plate current	20 mA	ClassA
Plate resistance	3500 Ohm	ClassA
Transconductance	4000 uS	ClassA
Amplification factor	14	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	1.25 pF	—
Output capacitance	0.75 pF	—
Grid-to-plate capacitance	1.5 pF	—