

ELECTRONIC TUBE REFERENCE

7X7

Voltage - Triode (with diode, heptode or hexode) electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS
CONSTRUCTION
DIODE-DIODE-TRIODE

Double-diode very-high-mu triode for detector, AVC, and voltage-amplifier service. Paired diode sections supply signal and control rectification while the triode provides substantial subsequent voltage gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8BZ	BASE PINS	–
NOMINAL HEATER	7 V / 320 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	67000 Ω
TRANSCONDUCTANCE	0.0015 S
AMPLIFICATION FACTOR	100
MAXIMUM PLATE VOLTAGE	300 V
Values promoted only where clearly published for this section in the approved source.	

SECTION2 Diode	
No fixed ratings recorded.	
Values promoted only where clearly published for this section in the approved source.	

SECTION3 Diode

No fixed ratings recorded.

Values promoted only where clearly published for this section in the approved source.

Twin diode-high-mu triode receiving tube.

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Diode #	1 uuf	Published source value; see source line context.
Diode #	2 uuf	Published source value; see source line context.
Diode Current per Plate with	5 MA	Published source value; see source line context.
Plate Current $V_{a/fqg}$	100 Volts	Published source value; see source line context.
Plate Resistance	85000 ohms	Published source value; see source line context.
Plate Current	1.2 MA	Published source value; see source line context.
Coupling Capacitance	11 uuf	Published source value; see source line context.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Diode #	2 uuf	Published source value; see source line context.
Heater Voltage gAC or DC) (Nominal)	7 Volts	Published source value; see source line context.
Maximum Plate Voltage	3155 Volts	Published source value; see source line context.
Heater Voltage ϵ	3 Volts	Published source value; see source line context.
Grid Voltage $r \sim$	-1 Volts	Published source value; see source line context.
Heater Voltage	6.3 Volts	Published source value; see source line context.
Plate Supply Voltage	1 Volts	Published source value; see source line context.
Grid Leak Following Stage	10 megohm	Published source value; see source line context.
Load Resistance	2 megohm	Published source value; see source line context.
Voltage Output (RMS) at	5 volts	Published source value; see source line context.

195X General Electric Essential Characteristics

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195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Grid voltage	-1 V	ClassA
Plate current	1.9 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	67000 ohm	ClassA
Transconductance	1500 uS	ClassA
Amplification factor	100	ClassA

TUBE TINKER

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