

Date: 3-18-47

NATIONAL UNION RADIO CORPORATION

Type 14X7

Twin Diode - High Mu Triode

Physical Specifications

Cathodes	Coated Unipotential
Base	Loktal 8-Pin
Bulb	T-9
Maximum Diameter	1-3/16"
Maximum Overall Length	3-5/32"
Maximum Seated Height	2-5/8"
Pin Connections:	
Pin 1 - Heater	Pin 5 - Diode Plate #1
2 - Triode Plate	6 - Diode Plate #2
3 - Triode Grid	7 - Cathode #2 (Diode #2)
4 - Cathode #1	8 - Heater
	(Triode & Diode #1) and Diode Shields

RMA Basing No. 8B7-L-4

Mounting Position Any

Direct Interelectrode Capacitances (without shield)

Diode #1 to All	2.9 uuf
Diode #2 to All	2.9 uuf
Diode #1 to Grid	.15 uuf max.
Diode #2 to Grid	.10 uuf max.
Diode #1 to Diode #2	.50 uuf max.

Ratings: Triode Unit

Heater Voltage (AC or DC) (Nominal)	14.0 volts
Heater Current (Nominal)	.12 amp.
Maximum Plate Voltage	300 volts

Diode Units (Two)

Diode Current per Plate with 5 volts DC applied 10.0 MA Min.

Average Characteristics - Triode Unit

Heater Voltage	12.6	12.6	volts
Heater Current	.150	.150	amp.
Plate Current (V _{g1})	100	250	volts
Grid Voltage	0	-1.0	volts
Amplification Factor	85	100	
Transconductance	1000	1500	umho.
Plate Resistance	85,000	67,000	ohms
Plate Current	1.2	1.8	MA

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Average Characteristics - Diode Unit

Diode Voltage 2.5 Volts
Perveance 6.0 MA

Typical Operating Conditions & Characteristics
Zero-Bias Resistance Coupled Amplifier Class A:

Heater Voltage	6.3	6.3 volts
Plate Supply Voltage	100	300 volts
Grid Leak Following Stage	10	10 megohm
Load Resistance	.25	.25 megohm
Coupling Capacitance	.01 to .005	.01 to .005 uuf
Grid Resistor of Following Tube	1.0	1.0 megohm
External Grid Circuit Impedance	0	0 megohm
Voltage Gain	30	40
Voltage Output (RMS) at 5% Dist.	6	30 volts

For interpretation of ratings refer to Receiving Tube Rating Sheets.

DEVELOPMENT ENGINEERING
NATIONAL UNION RADIO CORP.
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