SERVICE ENGINEERING BULLETIN

File No.

Prepared by Commercial Engineering Division
NATIONAL UNION RADIO CORPORATION

RMA RELEASE No. 392
Nov. 30, 1944

TYPE 306

TWIN TRIODE AMPLIFIER

PHYSICAL SPECIFICATIONS

CATHODE	COATED FILAMENT
BASE	LOKTAL 8-PIN
BULB	T-9
MAXIMUM DIAMETER	1-3/16"
MAXIMUM OVERALL LENGTH	2-25/32"
MAXIMUM SEATED HEIGHT	2-1/4"
RMA BASING No.	7BW-L-0

PIN CONNECTIONS:

PIN 1 - POSITIVE FILAMENT
2 - NO CONNECTION
3 - PLATE #2
4 - GRID #2
5 - GRID #1
6 - PLATE #1 & GETTER FLAG
7 - NEGATIVE FILAMENT (PARALLEL), FILAMENT C.T.
8 - NEGATIVE FILAMENT (SERIES)

MOUNTING POSITION — ANY

DIRECT INTERELECTRODE CAPACITANCES (WITHOUT SHIELD)

GRID-TO-PLATE (EACH SECTION)		1.7	UUF
INPUT (GRID-TO-FILAMENT-BASE) (EACH SECTION)		1.7	UUF
OUTPUT (PLATE-TO-FILAMENT-BASE)	SECTION 1	2.3	UUF
	SECTION 2	1.8	UUF
PLATE #1 TO PLATE #2		1.0	MAX. UUF
GRID #1 TO GRID #2		.20	MAX. UUF
GRID #1 TO PLATE #2		.06	MAX. UUF
GRID #2 TO PLATE #1		.10	MAX. UUF

RATINGS

	SERIES FILAMENT	PARALLEL FILAMENT	
MAXIMUM FILAMENT VOLTAGE			
DRY BATTERY OPERATION-VOLTAGE MUST NEVER EXCEED	3.2	1.6	VOLTS
AC/DC POWER LINE OPERATION-DESIGN CENTER	2.6	1.3	VOLTS
MAXIMUM PLATE VOLTAGE	110	110	VOLTS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

	SERIES FILAMENT*	PARALLEL FILAMENT		
FILAMENT VOLTAGE	2.8 DC	1.4DC	1.4DC	VOLTS
FILAMENT CURRENT	0.050	0.100	0.100	AMP.
PLATE VOLTAGE (EACH SECTION)	90	90	90	VOLTS
GRID VOLTAGE (EACH SECTION)	0	0	-3	VOLTS
PLATE CURRENT (SECTION #1)	4.5	4.5	1.4	MA
PLATE RESISTANCE (SECTION #1)	11,200	11,200	19,000	OHMS
TRANSCONDUCTANCE (SECTION #1)	1300	1300	760	UMHOS
AMPLIFICATION FACTOR (SECTION #1)	14.5	14.5	14.5	
PLATE CURRENT (SECTION #2)	3.2	4.5	1.4	MA
PLATE RESISTANCE (SECTION #2)	12,800	11,200	19,000	OHMS
TRANSCONDUCTANCE (SECTION #2)	1100	1300	760	UMHOS
AMPLIFICATION FACTOR (SECTION #2)	14.1	14.5	14.5	

SERVICE ENGINEERING BULLETIN

File No.

Prepared by Commercial Engineering Division

NATIONAL UNION RADIO CORPORATION

TYPE 3C6

*BOTH GRIDS RETURNED TO F-PIN #8

SECTION #2 IS RECOMMENDED FOR THE OSCILLATOR WITH GRID LEAK RETRUNED PROPERLY TO AVOID OSCILLATOR STARTING DIFFICULTIES.

FOR INTERPRETATION OF RATINGS REFER TO RECEIVING TUBE RATING SHEETS.

NOVEMBER 10, 1944