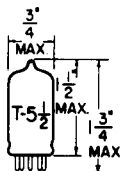


## TUNG-SOL

## TRIODE

MINIATURE TYPE



GLASS BULB

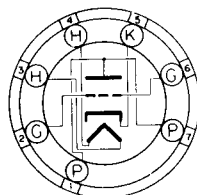
COATED UNIPOTENTIAL CATHODE

HEATER.

2.35 VOLTS 0.6 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

MINIATURE BUTTON  
7 PIN BASE

7DK

THE 2AF4B IS A MEDIUM MU TRIODE DESIGNED FOR LOCAL OSCILLATOR SERVICE IN TELEVISION RECEIVERS WHICH OPERATE IN THE ULTRA-HIGH-FREQUENCY REGION. INTERNAL LEAD INDUCTANCE IS REDUCED BY EMPLOYING DOUBLE CONNECTIONS TO THE PLATE AND GRID. THERMAL CHARACTERISTICS OF THE HEATER ARE CONTROLLED SUCH THAT HEATER VOLTAGE SURGES DURING THE WARM-UP CYCLE ARE MINIMIZED PROVIDED IT IS USED WITH OTHER TYPES WHICH ARE SIMILARLY CONTROLLED.

## DIRECT INTERELECTRODE CAPACITANCES

WITH NO EXTERNAL SHIELD

GRID TO PLATE	1.9	$\mu\text{mf}$
GRID TO CATHODE AND HEATER	2.2	$\mu\text{mf}$
PLATE TO CATHODE AND HEATER	0.45	$\mu\text{mf}$

## RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

## OSCILLATOR SERVICE

HEATER VOLTAGE	2.35	VOLTS
MAXIMUM PEAK HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE	180	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE <sup>A</sup>	180	VOLTS
MAXIMUM DC PLATE VOLTAGE	150	VOLTS
MAXIMUM DC GRID VOLTAGE	-50	VOLTS
MAXIMUM DC GRID CURRENT	.8	MA.
MAXIMUM PLATE INPUT	2.5	WATTS
MAXIMUM PLATE DISSIPATION	2.25	WATTS
MAXIMUM DC CATHODE CURRENT	28	MA.
MAXIMUM GRID CIRCUIT RESISTANCE:		
FIXED BIAS	NOT RECOMMENDED	
CATHODE BIAS	0.5	MEG OHM
HEATER WARM-UP TIME*	11.0	SECONDS

<sup>A</sup> THE DC COMPONENT MUST NOT EXCEED 100 VOLTS.

\* HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH 80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATING RESISTANCE.

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS  $A_1$  AMPLIFIER

HEATER VOLTAGE	2.35	VOLTS
HEATER CURRENT	0.6	AMP.
PLATE VOLTAGE	80	VOLTS
CATHODE BIAS RESISTOR	150	OHMS
AMPLIFICATION FACTOR	15	
PLATE RESISTANCE	2 270	OHMS
TRANSCONDUCTANCE	6 600	$\mu$ MHOS
PLATE CURRENT	16	MA.

## OPERATION AT 950 MC.

DC PLATE VOLTAGE	100	VOLTS
DC GRID VOLTAGE	-4	VOLTS
FROM A GRID RESISTOR OF	10 000	OHMS
DC PLATE CURRENT	22	MA.
DC GRID CURRENT (APPROX.)	400	$\mu$ AMP.

*SIMILAR TYPE REFERENCE: Except for the higher heater-cathode voltage rating, the 2AF4B is identical to the 2AF4A.*

*The 2AF4 curves also apply to 2AF4B.*

