

## TUNG-SOL

### DOUBLE-DIODE TRIODE

MINIATURE TYPE

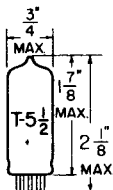
COATED UNIPOTENTIAL CATHODE

HEATER

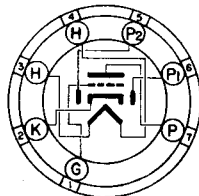
6.3 VOLTS 300 MA.

AC OR DC

ANY MOUNTING POSITION



GLASS BULB



BOTTOM VIEW

MINIATURE BUTTON  
7 PIN BASE

THE 6AV6 COMBINES A HIGH-MU TRIODE AND TWO INDEPENDENT DIODE UNITS IN THE 7-PIN MINIATURE CONSTRUCTION. IT PERMITS A SINGLE TUBE TO FUNCTION AS DETECTOR, AVC RECTIFIER, AND AUDIO AMPLIFIER. COUPLING BETWEEN THE DIODE AND TRIODE SECTIONS IS MINIMIZED BY THE USE OF INTERNAL SHIELDING.

### RATINGS

INTERPRETED ACCORDING TO RMA STANDARD M8-210

FILAMENT VOLTAGE	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE	90	VOLTS
MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM DIODE CURRENT EACH PLATE FOR CONTINUOUS OPERATION	1.0	MA.

### TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

#### TRIODE UNIT - CLASS A<sub>1</sub> AMPLIFIER

FILAMENT VOLTAGE	6.3	6.3	VOLTS
FILAMENT CURRENT	300	300	MA.
PLATE VOLTAGE	100	250	VOLTS
GRID VOLTAGE	-1	-2	VOLTS
PLATE CURRENT	0.5	1.2	MA.
PLATE RESISTANCE	80 000	62 500	OHMS
TRANSCONDUCTANCE	1 250	1 600	μMHMS
AMPLIFICATION FACTOR	100	100	

#### DIODE UNITS - TWO

THE DIODE UNITS ARE INDEPENDENT OF THE TRIODE UNIT EXCEPT FOR THE COMMON CATHODE SLEEVE.

DIODE BIASING OF THE TRIODE UNIT IS NOT SUITABLE.

*SIMILAR TYPE REFERENCE: Ratings and characteristics somewhat similar to 6AT6 except for the use of more thorough shielding of the diode units from the triode.*

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1959  
FEB. 2,  
1948

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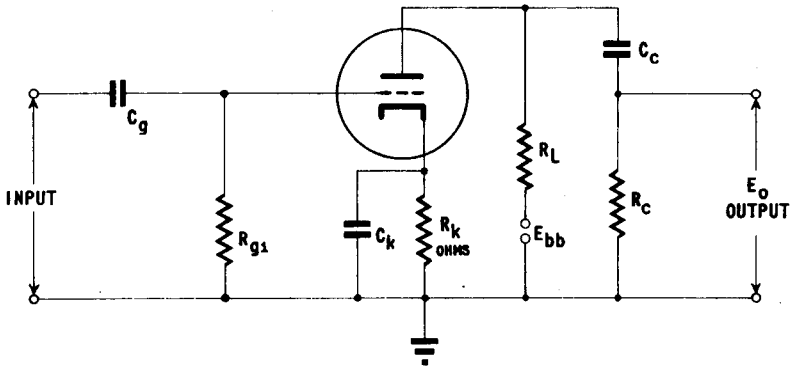
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## RESISTANCE COUPLED AMPLIFIER

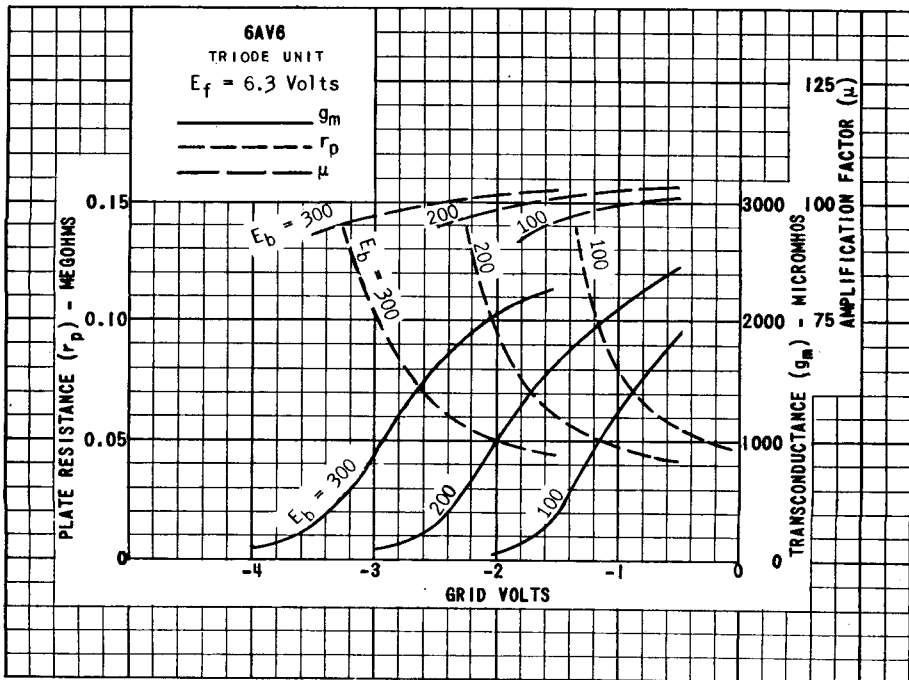
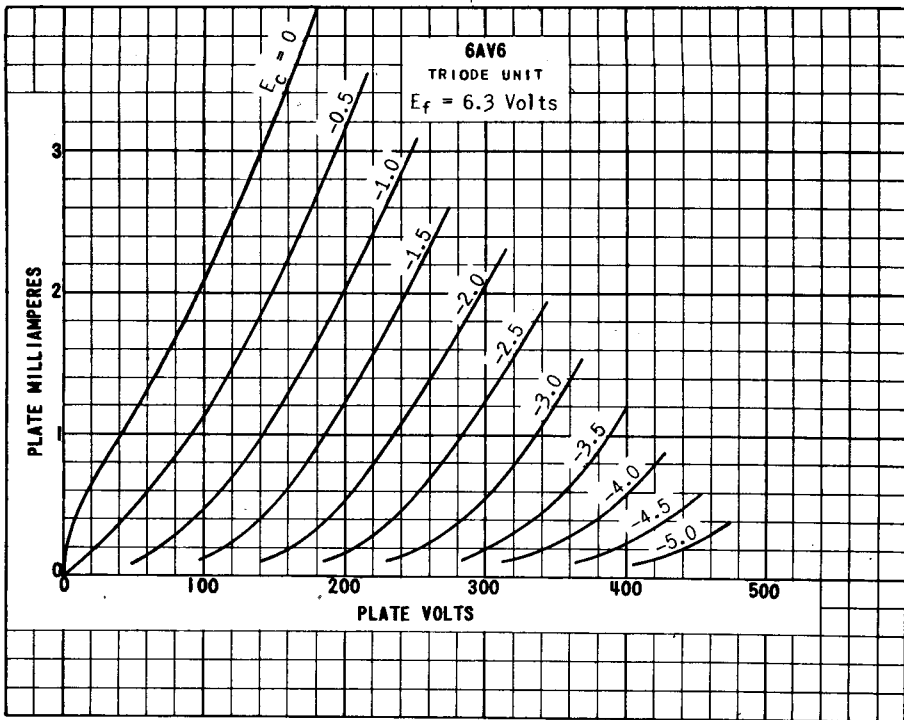
$R_L$ MEG.	$R_C$ MEG.	$E_{bb} = 90$ VOLTS			$E_{bb} = 180$ VOLTS			$E_{bb} = 300$ VOLTS		
		$R_k$	GAIN	$E_o$	$R_k$	GAIN	$E_o$	$R_k$	GAIN	$E_o$
0.1	0.22	4700	35 <sup>A</sup>	4	2000	47	18	1500	52	40
0.22	0.47	7400	45 <sup>B</sup>	6	3500	59	24	2800	65	49
0.47	1.0	13000	52 <sup>C</sup>	8	6700	66	28	5200	73	54

 $E_o$  IS RMS OUTPUT AT GRID CURRENT POINT.

GAIN MEASURED AT 5.0 VOLTS RMS OUTPUT EXCEPT AS INDICATED.

<sup>A</sup> OUTPUT VOLTAGE OF 2 VOLTS RMS.<sup>B</sup> OUTPUT VOLTAGE OF 3 VOLTS RMS.<sup>C</sup> OUTPUT VOLTAGE OF 4 VOLTS RMS.

NOTE: COUPLING CAPACITORS  $C_g$  AND  $C_c$  SHOULD BE SELECTED TO GIVE DESIRED FREQUENCY RESPONSE.  $R_k$  SHOULD BE ADEQUATELY BY-PASSED BY CAPACITOR  $C_k$ .



PRINTED IN U. S. A.

PLATE 1961  
FEB. 2,  
1948

# 6AV6

6AV6  
EACH DIODE UNIT  
 $E_f = 6.9$  Volts

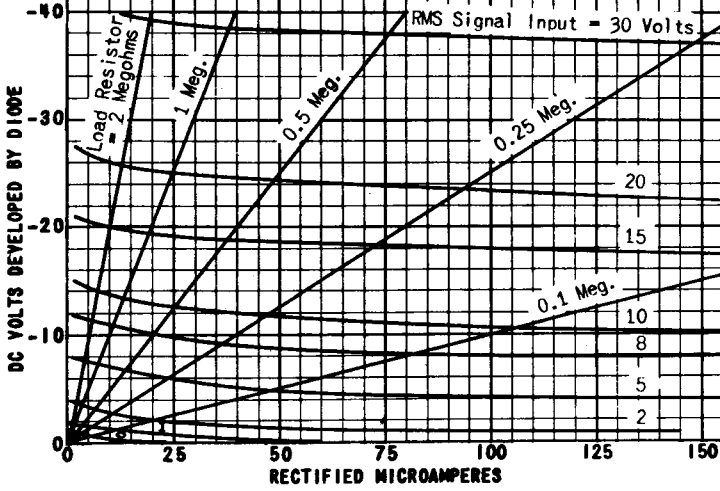


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1962  
FEB. 2,  
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