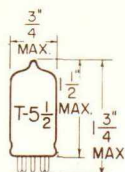


TUNG-SOL

PENTODE

MINIATURE TYPE



GLASS BULB

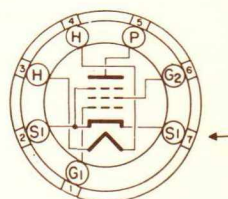
COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 175 MA.

AC OR DC

ANY MOUNTING POSITION


 BOTTOM VIEW
 MINIATURE BUTTON
 7 PIN BASE

780

THE 6AK5 IS A SHARP CUT-OFF VOLTAGE AMPLIFIER USING THE MINIATURE CONSTRUCTION. IT IS CHARACTERIZED BY LOW HEATER POWER REQUIREMENTS, HIGH TRANSCONDUCTANCE AND INPUT IMPEDANCE, AND LOW INTERELECTRODE CAPACITANCES AND LEAD INDUCTANCES. THESE RESULT IN A HIGHLY FAVORABLE MERIT FACTOR FOR HIGH FREQUENCY WIDE-BAND APPLICATIONS.

DIRECT INTERELECTRODE CAPACITANCES

	WITH SHIELD ^A	WITHOUT SHIELD	
GRID TO PLATE: (G ₁ TO P) MAX.	0.02	0.03	μf
INPUT: G ₁ TO (H+K+G ₂ +G ₃ &1S)	4	4	μf
OUTPUT: P TO (H+K+G ₂ +G ₃ &1S)	2.8	2.1	μf

^AEXTERNAL SHIELD #316 CONNECTED TO PINS #2 AND #7.

RATINGS

INTERPRETED ACCORDING TO DESIGN-MAXIMUM SYSTEM

HEATER VOLTAGE	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE	120 ←	VOLTS
MAXIMUM PLATE VOLTAGE	180	VOLTS
MAXIMUM GRID #2 SUPPLY VOLTAGE	180	VOLTS
MAXIMUM GRID #2 VOLTAGE	SEE J5-C4 ←	VOLTS
MAXIMUM PLATE DISSIPATION	1.7	WATTS
MAXIMUM GRID #2 DISSIPATION	0.5	WATT
MAXIMUM POSITIVE DC GRID #1 VOLTAGE	0	VOLTS
MAXIMUM CATHODE CURRENT	18	MA.

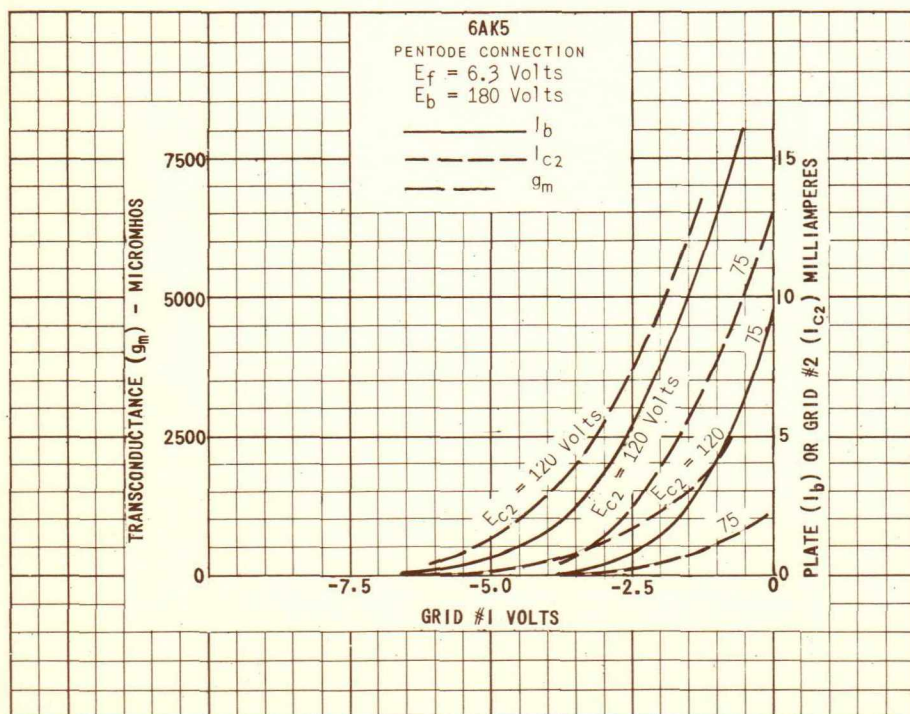
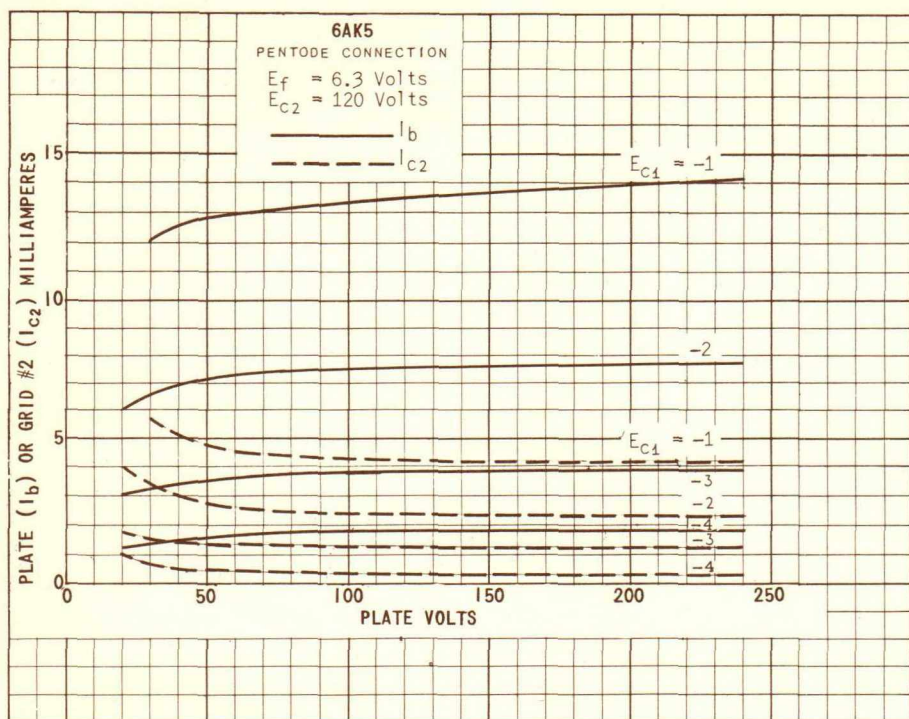
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A₁ AMPLIFIER

HEATER VOLTAGE	6.3	6.3	VOLTS
HEATER CURRENT	175	175	MA.
PLATE VOLTAGE	120	180	VOLTS
GRID #2 VOLTAGE	120	120	VOLTS
CATHODE RESISTOR	180	180	OHMS
PLATE RESISTANCE (APPROX.)	0.3	0.5	MEGOHM
TRANSCONDUCTANCE	5000	5100	μMHOS
PLATE CURRENT	7.5	7.7	MA.
GRID #2 CURRENT	2.5	2.4	MA.
GRID #2 VOLTAGE (APPROX.) FOR I _b = 10 μA.	-8.5	-8.5	VOLTS

→ INDICATES A CHANGE.

6AK5



TUNG-SOL

POWER AMPLIFIER PENTODE

MINIATURE TYPE

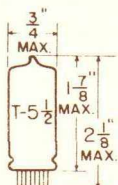
COATED UNIPOTENTIAL CATHODE

HEATER

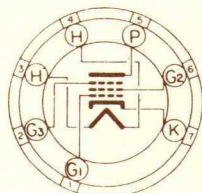
6.3 VOLTS 0.15 AMPERE

AC OR DC

ANY MOUNTING POSITION



GLASS BULB


 BOTTOM VIEW
 MINIATURE BUTTON
 7 PIN BASE

THE 6AK6 IS A HEATER-CATHODE TYPE OF TUBE INTENDED FOR USE IN COMPACT, LIGHT-WEIGHT EQUIPMENT. BECAUSE OF ITS SMALL SIZE, THE 6AK6 CAN BE USED SINGLY OR IN PUSH-PULL TO EFFECT A MORE COMPACT DESIGN OF POWER-LINE RECEIVERS.

RATINGS

INTERPRETED ACCORDING TO RMA STANDARD MB-210

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.15	AMP.
MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM SCREEN VOLTAGE	250	VOLTS
MAXIMUM PLATE DISSIPATION	2.75	WATTS
MAXIMUM SCREEN DISSIPATION	0.75	WATTS
MAXIMUM DC HEATER-CATHODE VOLTAGE	100	VOLTS

 DIRECT INTERELECTRODE CAPACITANCES - APPROX.
 WITH NO EXTERNAL SHIELD

GRID TO PLATE	0.12	μ f
INPUT	3.6	μ f
OUTPUT	4.2	μ f

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A₁ AMPLIFIER

PLATE VOLTAGE	180	VOLTS
SCREEN VOLTAGE	180	VOLTS
SUPPRESSOR VOLTAGE	0	VOLTS
GRID VOLTAGE	-9	VOLTS
PEAK AF GRID VOLTAGE	9	VOLTS
ZERO-SIGNAL PLATE CURRENT	15	MA.
ZERO-SIGNAL SCREEN CURRENT	2.5	MA.
GRID RESISTOR (MAX.):		
FOR FIXED BIAS	0.1	MEGOHM
FOR CATHODE BIAS	0.5	MEGOHM
LOAD RESISTANCE	10 000	OHMS
PLATE RESISTANCE	0.2	MEGOHM
TRANSCONDUCTANCE	2 300	μ MHOS
MAXIMUM-SIGNAL POWER OUTPUT	1.1	WATTS
TOTAL HARMONIC DISTORTION	10	PERCENT

SIMILAR TYPE REFERENCE: Rating and characteristics identical to 6G6G.

→ INDICATES A CHANGE OR ADDITION

6AK6

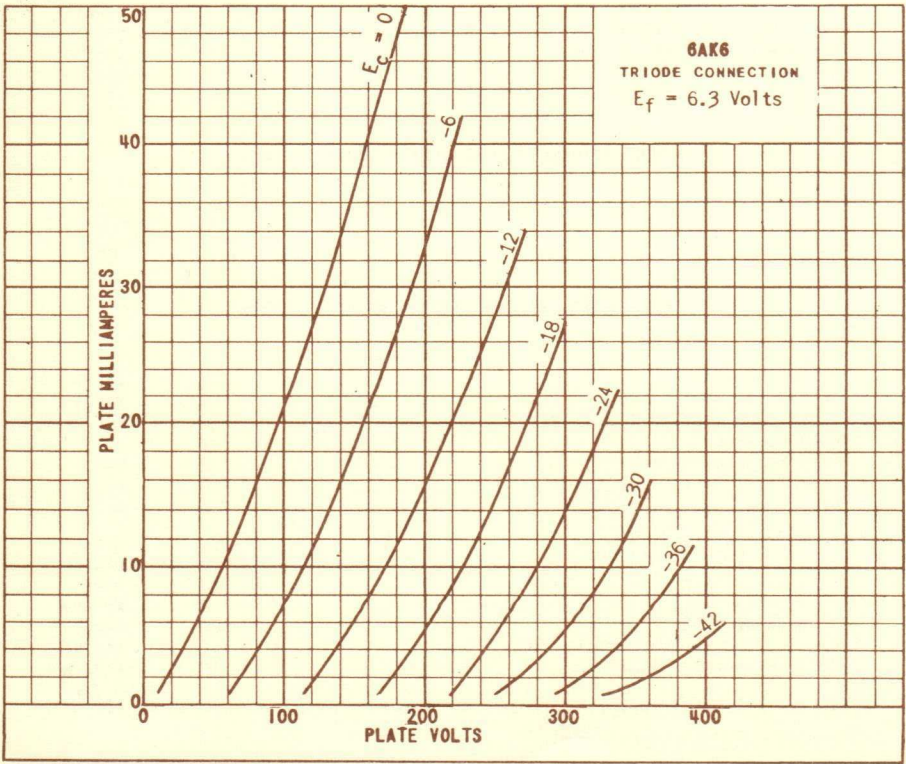
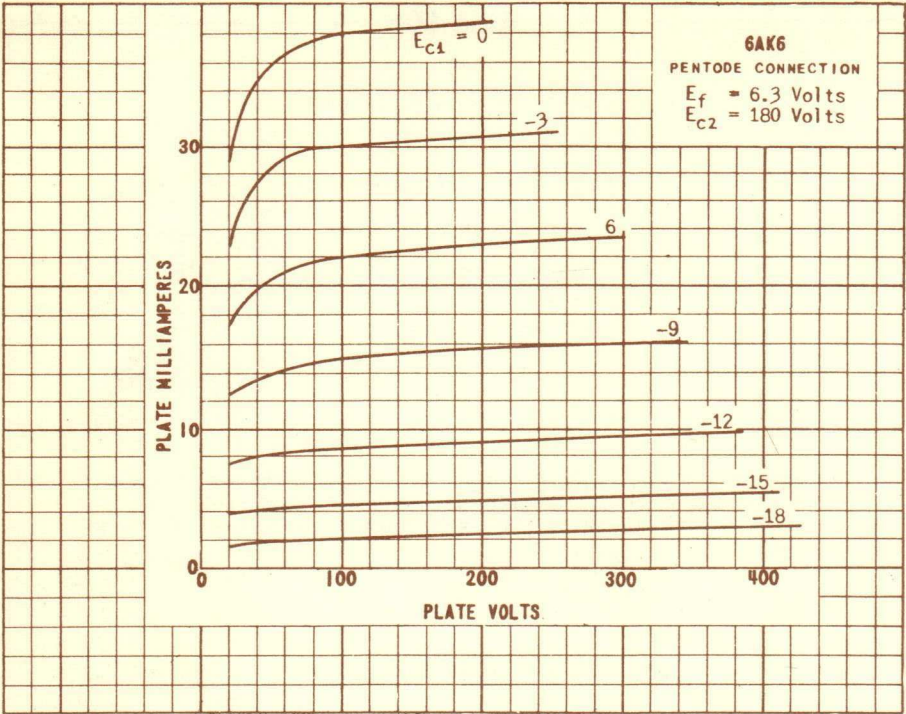


PLATE
1780
FEB. 3,
1947