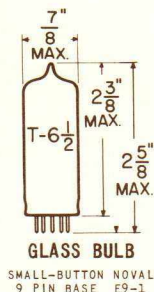


TUNG-SOL

TRIODE PENTODE

MINIATURE TYPE

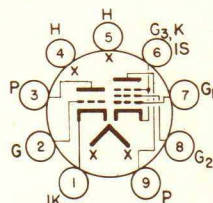


UNIPOTENTIAL CATHODE

HEATER

 6.3 ± 0.6 VOLTS 0.75 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

BASING DIAGRAM
JEDEC 90X

THE 6HF8 IS A HIGH-MU TRIODE AND A SHARP-CUTOFF PENTODE IN THE 9 PIN MINIATURE CONSTRUCTION. IT IS INTENDED FOR USE IN COLOR AND BLACK-AND-WHITE TELEVISION RECEIVERS.

THE PENTODE UNIT IS ESPECIALLY USEFUL AS A VIDEO OUTPUT AMPLIFIER AND THE TRIODE UNIT IS USEFUL IN VOLTAGE-AMPLIFIER APPLICATIONS SUCH AS SYNC-SEPARATOR, SYNC-CLIPPER AND PHASE-INVERTER CIRCUITS.

EXCEPT FOR HEATER RATINGS AND HEATER WARM-UP TIME, THE 6HF8 IS IDENTICAL TO THE 10HF8.

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

TRIODE UNIT:

GRID TO PLATE	3.5	pf
GRID TO TRIODE CATHODE, PK, G3, I.S. & H.	2.8	pf
PLATE TO TRIODE CATHODE, PK, G3, I.S. & H.	2.6	pf

PENTODE UNIT:

GRID #1 TO PLATE (MAX.)	0.1	pf
GRID #1 TO K, I.S., G3, G2 & H	10	pf
PLATE TO K, I.S., G3, G2 & H.	4.2	pf
TRIODE GRID TO PENTODE PLATE (MAX.)	0.015	pf

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM

CLASS A₁ AMPLIFIER

	TRIODE UNIT	PENTODE UNIT	
HEATER VOLTAGE		6.3 ± 0.6	VOLTS
MAXIMUM PLATE VOLTAGE	330	330	
MAXIMUM GRID #2 SUPPLY VOLTAGE	---	330	VOLTS
MAXIMUM GRID #2 (SCREEN-GRID) VOLTAGE	---	SEE INPUT RATING CHART	
MAXIMUM GRID #1 (CONTROL-GRID) VOLTAGE:			
POSITIVE-BIAS VALUE	0	0	VOLTS

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

RATINGS - CONT'D.
 INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM
 CLASS A_1 AMPLIFIER

	TRIODE UNIT	PENTODE UNIT	
MAXIMUM PLATE DISSIPATION	1	5	WATTS
MAXIMUM GRID #2 INPUT			
FOR GRID #2 VOLTAGES UP TO 165 V.	---	1.1	WATTS
FOR GRID #2 VOLTAGES BETWEEN 165 AND 330 VOLTS			
		SEE INPUT RATING CHART	
MAXIMUM PEAK HEATER-CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE	200	200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	200 ^A	200 ^A	VOLTS

^ATHE DC COMPONENT MUST NOT EXCEED 100 VOLTS.

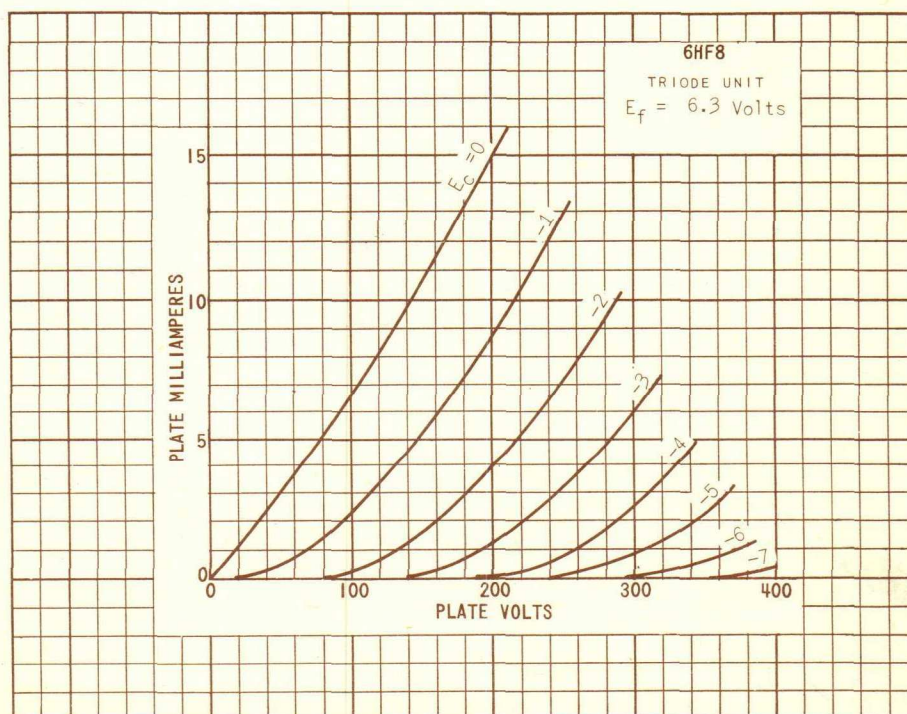
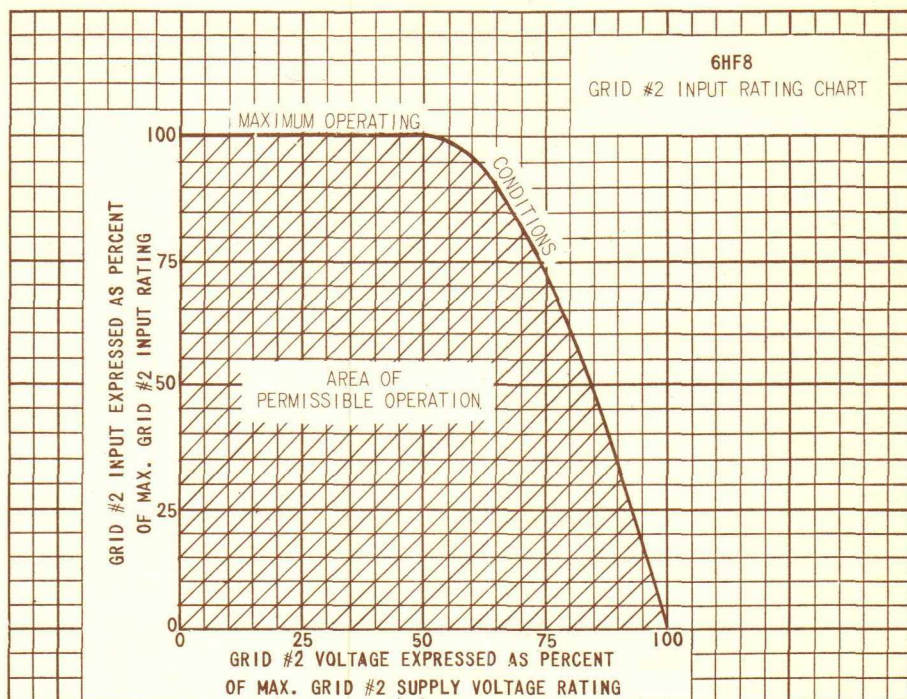
CHARACTERISTICS
 CLASS A_1 AMPLIFIER

	TRIODE UNIT	PENTODE UNIT	
PLATE-SUPPLY VOLTAGE	200	45 200	VOLTS
GRID #2 SUPPLY VOLTAGE	---	125 125	VOLTS
GRID #1 VOLTAGE	-2	0 ---	VOLTS
CATHODE RESISTOR	---	68	OHMS
AMPLIFICATION FACTOR	70	---	
PLATE RESISTANCE (APPROX.)	17500	75000	OHMS
TRANSCONDUCTANCE	4000	12500	μ MHOS
PLATE CURRENT	4	40 ^B 25	MA.
GRID #2 CURRENT	---	15 ^B 7	MA.
GRID #1 VOLTAGE (APPROX.)			
FOR PLATE CURRENT OF 100 μ A	---	-9	VOLTS
GRID #1 VOLTAGE (APPROX.)			
FOR PLATE CURRENT OF 20 μ A	-6	---	VOLTS

MAXIMUM CIRCUIT VALUES

	TRIODE UNIT	PENTODE UNIT	
GRID #1 CIRCUIT RESISTANCE:			
FOR CATHODE-BIAS OPERATION (MAX.)	1.0	1.0	MEG OHM
FOR FIXED-BIAS OPERATION (MAX.)	0.5	0.25	MEG OHM

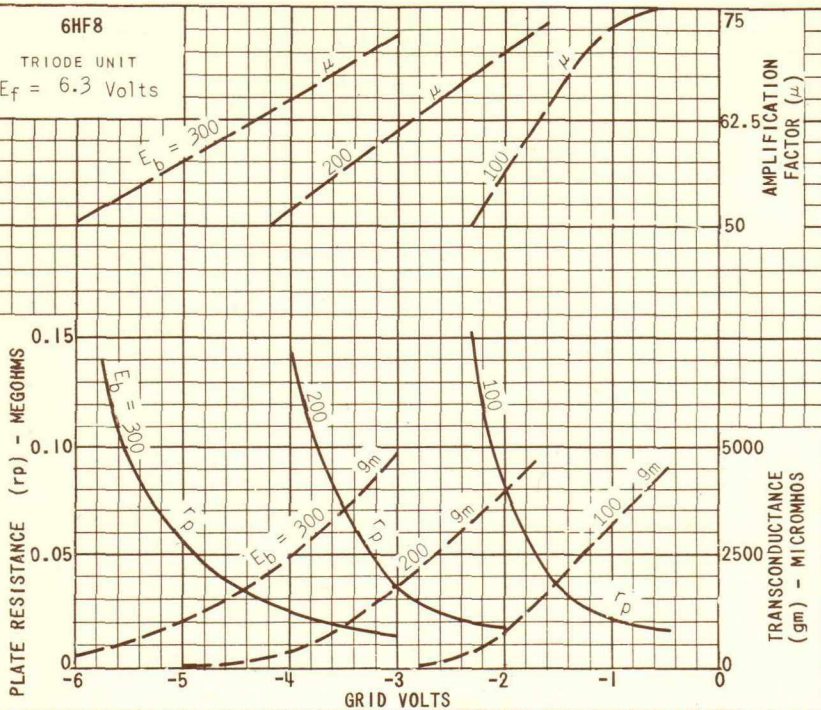
^BTHESE VALUES CAN BE MEASURED BY A METHOD INVOLVING A RECURRENT WAVEFORM SUCH THAT PLATE DISSIPATION AND GRID #2 INPUT WILL BE KEPT WITHIN RATINGS IN ORDER TO PREVENT DAMAGE TO THE TUBE.



6HF8

6HF8

TRIODE UNIT
 $E_f = 6.3$ Volts



6HF8

PENTODE UNIT
 $E_f = 6.3$ Volts
 $E_{c2} = 125$ Volts

