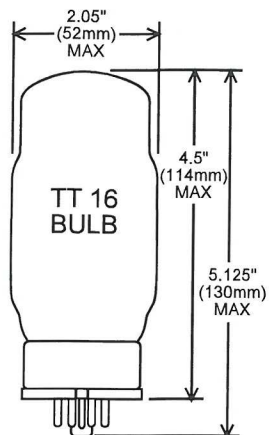


# TUNG-SOL PENTODE

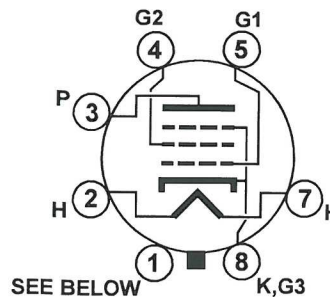


**GLASS BULB**  
**LARGE WAFER OCTAL**  
**WITH BARRIERS**  
**7 PIN LOW LOSS B7-99**

FOR  
 AUDIO SERVICE APPLICATIONS

OXIDE COATED INDIRECTLY HEATED  
 UNIPOTENTIAL CATHODE

ANY MOUNTING POSITION



**BOTTOM VIEW**  
**BASING DIAGRAM**  
**JEDEC 7AC**  
**PIN 1 - NO CONNECTION**  
**OR BASE SHELL**

THE KT120 IS A BEAM PENTODE POWER AMPLIFIER PRIMARILY DESIGNED FOR AUDIO SERVICE. IT CARRIES A 60 WATT PLATE DISSIPATION RATING WHICH PROVIDES FOR PUSH-PULL AMPLIFIER DESIGNS UP TO 200 WATTS OUTPUT. CONSTRUCTION FEATURES PROVIDE FOR RELIABLE OPERATION AT FULL RATINGS.

## DIRECT INTERELECTRODE CAPACITANCES

WITHOUT SHIELD

GRID 1 TO PLATE	1.8	pf
INPUT	29	pf
OUTPUT	10	pf

## HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3	VOLTS	1.7 - 1.95	AMP
HEATER SUPPLY LIMITS VOLTAGE OPERATION			6.3 +/- 0.6	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE				
HEATER NEGATIVE WITH RESPECT TO CATHODE				
TOTAL DC AND PEAK	300			VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE				
TOTAL DC AND PEAK	200			VOLTS

CONTINUED ON FOLLOWING PAGE

→ INDICATES A CHANGE

**TUNG-SOL**

CONTINUED FROM PREVIOUS PAGE

**MAXIMUM RATINGS**

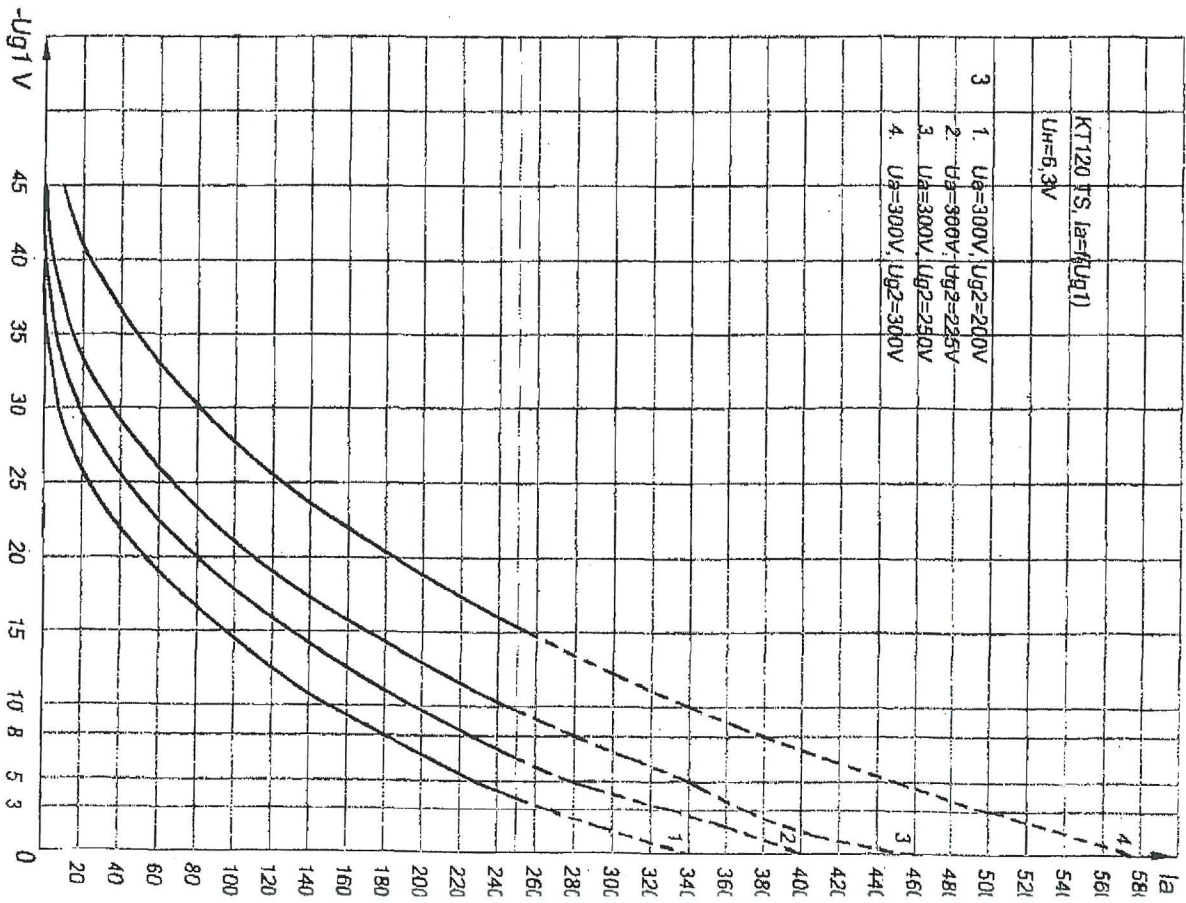
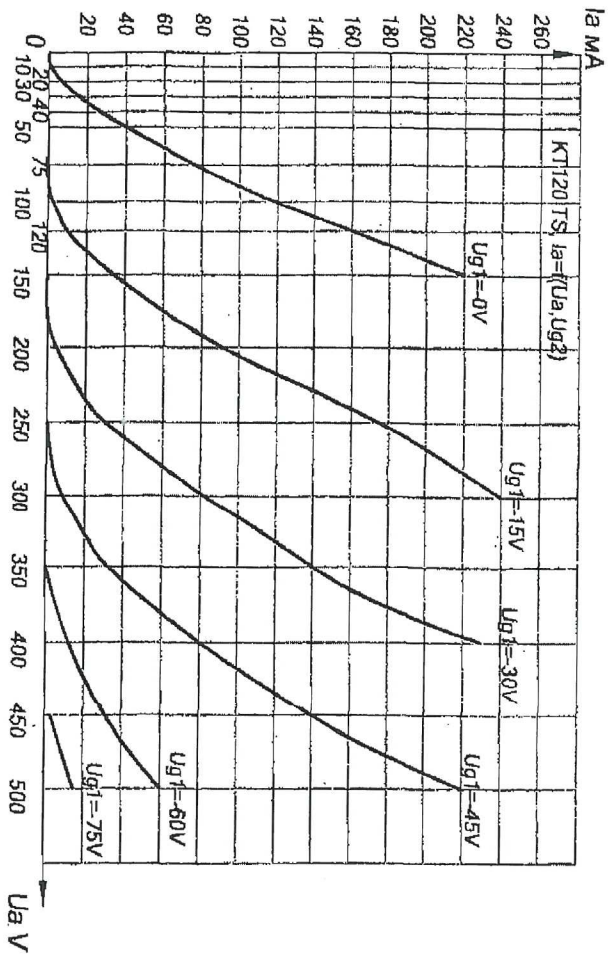
DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

PLATE VOLTAGE, DC		
TETRODE	850	VOLTS
TRIODE	650	VOLTS
GRID 2 VOLTAGE, DC		
PENTODE CONNECTION	650	VOLTS
TRIODE & ULTRALINEAR CONNECTION	600	VOLTS
GRID 1 VOLTAGE, DC	-200	VOLTS
PLATE DISSIPATION	60	WATTS
GRID 2 DISSIPATION	8.0	WATTS
CATHODE CURRENT		
PENTODE CONNECTION	250	MA
TRIODE & ULTRALINEAR CONNECTION	230	MA
GRID 1 CIRCUIT RESISTANCE		
FIXED BIAS	51,000	OHMS
SELF BIAS	240,000	OHMS
BULB TEMPERATURE	250	CELSIUS

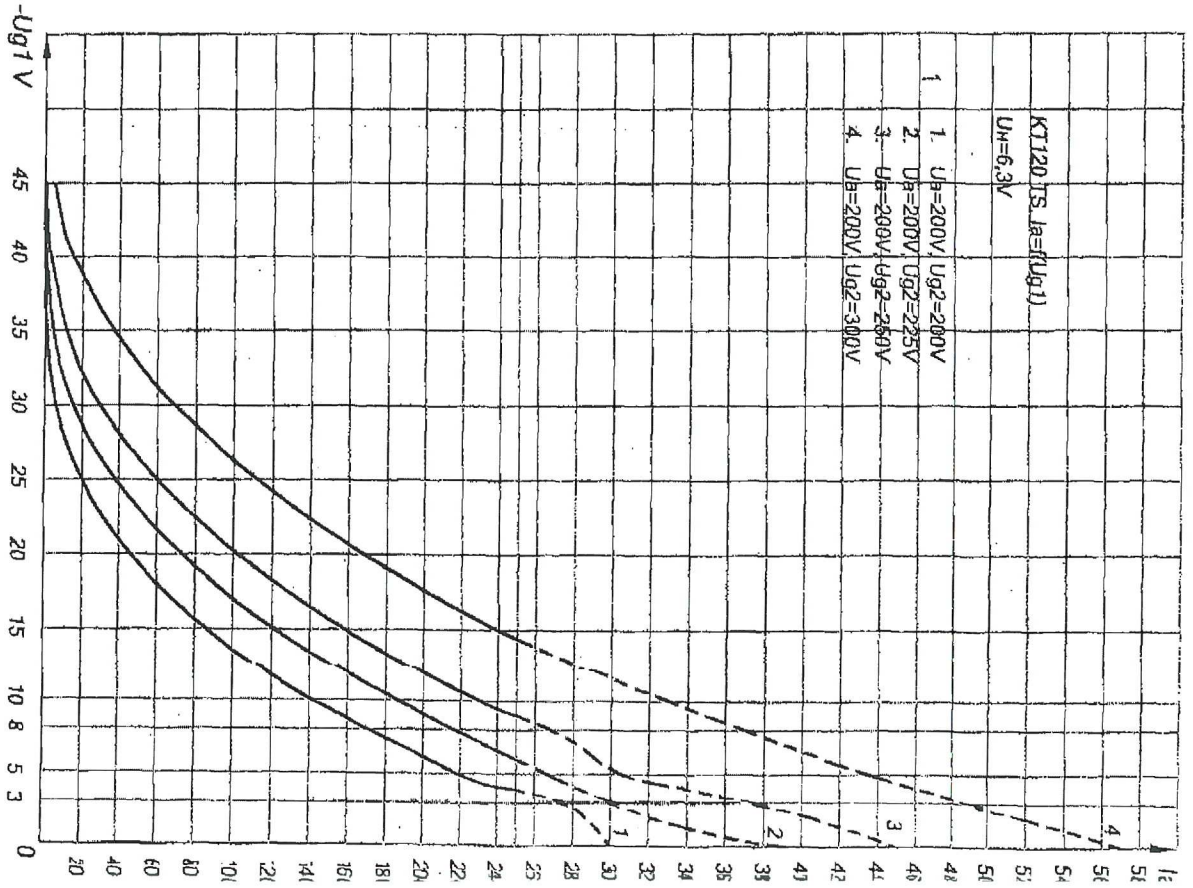
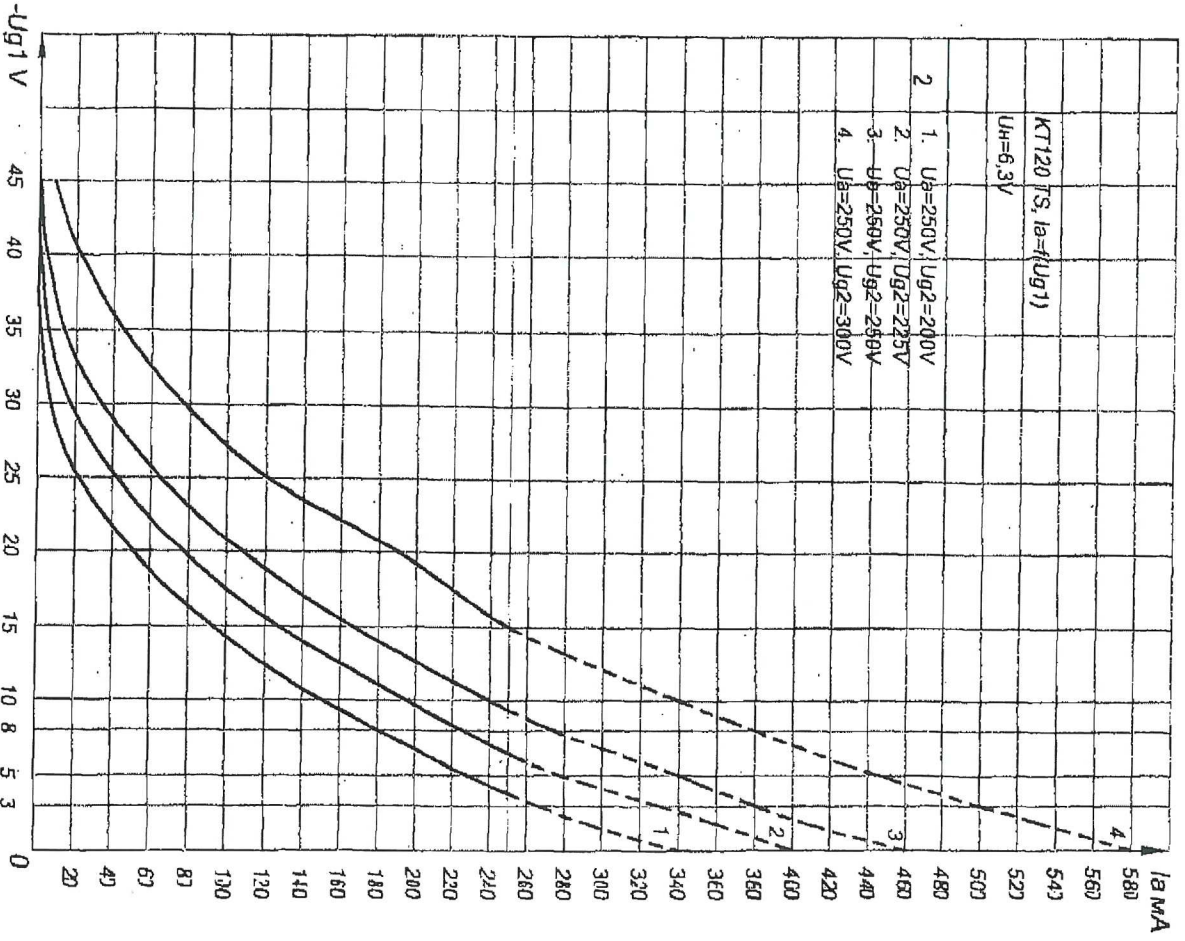
**AVERAGE CHARACTERISTICS**

CLASS A1 AUDIO AMPLIFIER - SINGLE TUBE

PLATE VOLTAGE	400	VOLTS
GRID 2 VOLTAGE	225	VOLTS
GRID 1 VOLTAGE	-14	VOLTS
PLATE CURRENT (RANGE)	135 - 165	MA
GRID 2 CURRENT (NOT MORE THAN)	14	MA
TRANSCONDUCTANCE (NOT LESS THAN)	12.5	mA/V
PLATE RESISTANCE (APROX.)	3000	OHMS
MAX. SIGNAL POWER OUTPUT (NOT LESS THAN)	20	WATTS
TOTAL HARMONIC DISTORION (NOT MORE THAN)	14	PERCENT
CATHODE TO HEATER LEAKAGE (NOT MORE THAN)		
(WITH $\pm 300V$ HEATER TO CATHODE DIFFERENCE)	30	$\mu A$



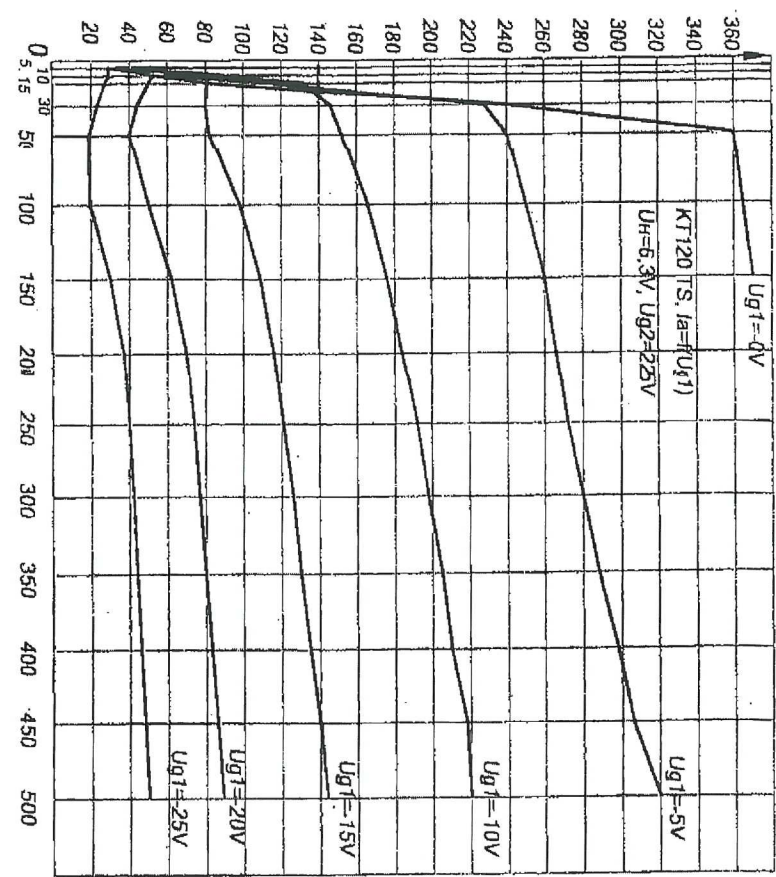
26.04.2010



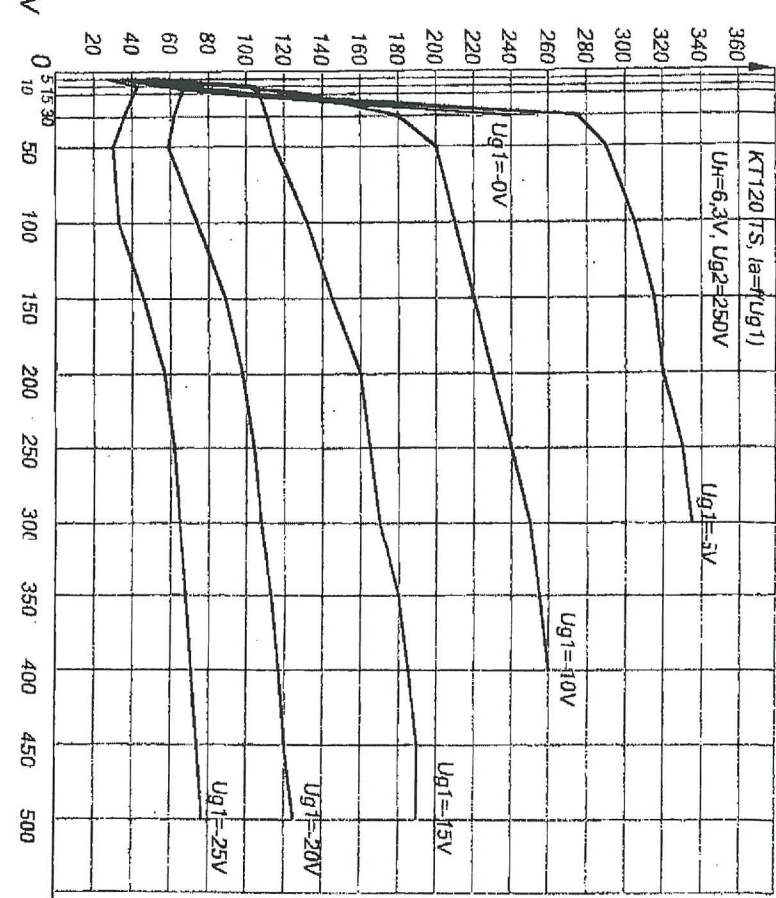
Handwritten note: *ср. - К.Г. от 2010г.*

Handwritten mark: *А.А.*

$U_a=400V, U_{g2}=225V, U_{g1}=-14V$   
 $I_a=153mA, I_{g2}=10.5mA$



$U_a=400V, U_{g2}=225V, U_{g1}=-14V$   
 $I_a=153mA, I_{g2}=10.2mA$



*Handwritten signature and date:*  
2.6.01.2010