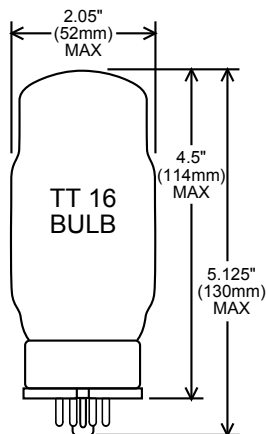


# TUNG-SOL

## PENTODE

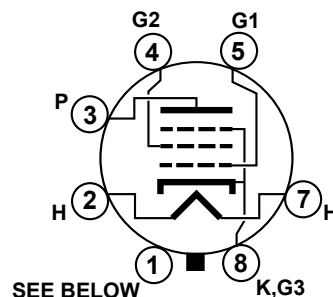


**GLASS BULB**  
**LARGE WAFER OCTAL**  
**WITH BARRIERS**  
**7 PIN LOW LOSS B7-99**

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	$\mu A$