

TUNG-SOL

PENTODE

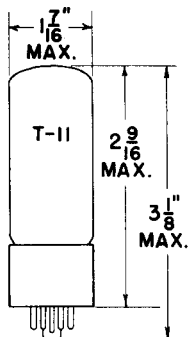
COATED UNIPOTENTIAL CATHODE

HEATER

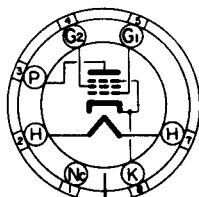
26.5 VOLTS 0.30AMP.

AC OR DC

ANY MOUNTING POSITION



GLASS BULB



BOTTOM VIEW

SHORT INTERMEDIATE
SHELL 8 PIN OCTAL
LOW LOSS PHENOLIC

75

THE 26E6WG IS A RUGGEDIZED, SINGLE-ENDED BEAM PENTODE USED IN AF POWER OUTPUT APPLICATIONS REQUIRING APPROXIMATELY FIVE WATTS. THE HEATER DESIGN MAKES THIS TYPE IDEAL FOR OPERATION IN AIRBORNE EQUIPMENT WHERE A 26 VOLT POWER SUPPLY IS NORMALLY AVAILABLE. ALSO THE RUGGEDIZED STRUCTURE IS CAPABLE OF WITHSTANDING SEVERE SHOCK AND VIBRATION SUCH AS THAT ENCOUNTERED IN AIRCRAFT.

RATINGS

ABSOLUTE MAXIMUM VALUES

HEATER VOLTAGE	26.5±15%	VOLTS
MAXIMUM DC PLATE VOLTAGE	220	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	150	VOLTS
MAXIMUM PLATE DISSIPATION	12.5	WATTS
MAXIMUM GRID #2 DISSIPATION	1.75	WATT
MAXIMUM HEATER CATHODE VOLTAGE	±300	VOLTS
MAXIMUM ALTITUDE	10 000	FEET

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A₁ AMPLIFIER

HEATER VOLTAGE	26.5	VOLTS
HEATER CURRENT	0.3	AMP.
DC PLATE VOLTAGE	200	VOLTS
DC GRID #1 VOLTAGE	-14	VOLTS
DC GRID #2 VOLTAGE	135	VOLTS
PEAK AF SIGNAL VOLTAGE	14	VOLTS
ZERO SIGNAL PLATE CURRENT	61	Ma
ZERO SIGNAL GRID #2 CURRENT	3.0	Ma
MAXIMUM SIGNAL PLATE CURRENT	56	MA
MAXIMUM SIGNAL GRID #2 CURRENT	9	mA

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TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS - CONT'D.
CLASS A₁ AMPLIFIER

PLATE RESISTANCE	18 000	OHMS
TRANSCONDUCTANCE	7 100	μMHOS
EXTERNAL PLATE LOAD RESISTANCE	2 600	OHMS
TOTAL HARMONIC DISTORTION	10	PERCENT
POWER OUTPUT	6	WATTS

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN

$E_f = 26.5V$, $E_b = 200Vdc$, $E_{c2} = 135Vdc$, $E_{c1} = -14Vdc$

EXCEPT AS MODIFIED BELOW

	INITIAL		500 HOUR LIFE TEST				
	INDIVIDUAL MIN.	MAX.	PROD. MIN.	AVG. MAX.	INDIVIDUAL MIN.	MAX.	
HEATER CURRENT	275	325	---	---	---	---	mA
HEATER-CATHODE LEAKAGE	0	75	---	---	---	---	μAdc
TOTAL GRID CURRENT	0	-3	---	---	---	---	μAdc
PLATE CURRENT (1)	43	79	---	---	---	---	mAdc
POWER OUTPUT ^B	4.8	---	---	---	2.9	---	WATTS
PLATE CURRENT (2) ($E_{c1} = 45 Vdc$)	0	1	---	---	---	---	mAdc
SCREEN GRID CURRENT	0	6	---	---	---	---	mAdc
TRANSCONDUCTANCE	5800	8400	---	---	---	---	μMHOS
GRID EMISSION ($E_b = E_{c1} = E_{c2} = 30Vdc$)	180	---	---	---	---	---	mAdc

SPECIAL REQUIREMENTS

	MIN.	MAX.	
VARIABLE FREQUENCY VIBRATION ^C ($R_p = 2000$, $E_{c1} = -22Vdc$)	---	750	mVac
LOW FREQUENCY VIBRATION ^D ($R_p = 2000$, $E_{c1} = -22 dc$)	---	350	mVac
SHOCK ^E (HAMMER ANGLE = 48°)	---	---	
VIBRATIONAL FATIGUE ^F			
POST SHOCK AND FATIGUE END POINTS			
LOW FREQUENCY VIBRATION	---	500	mVac
HEATER-CATHODE LEAKAGE		0	100
PLATE CURRENT (2)		0	2
POWER OUTPUT	4.15	---	WATTS
MECHANICAL RESONANCE ^G	---	---	
AF NOISE ^H ($E_{sig} = 200 mVac$, $R_p = 2000$)	---	17	VU
HEATER CYCLING LIFE TEST ($E_f = 32Vac$, $E_b = E_{c2} = E_{c1} = 0$)	---	---	

NOTES

^A DURING THE FIRST 100 HOURS OF LIFE, PLATE CURRENT (1) SHALL NOT CHANGE BY MORE THAN 15% FROM ITS INITIAL VALUE.

^B $E_{s1} = 9.9 Vac$, $R_p = 2600$

^C SEE MIL-E-1C 4.9.20.3

^D SEE MIL-E-1C 4.9.20.4

^E SEE MIL-E-1C 4.9.20.5

^F SEE MIL-E-1C 4.9.20.6

^G THE MOUNT SHALL EXHIBIT NO PRONOUNCED MECHANICAL RESONANCE BELOW 100 CPS.

^H SEE MIL-E-1C 4.10.3.2