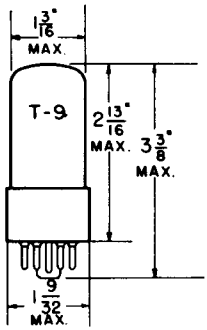
TUNG-SOL

BEAM PENTODE

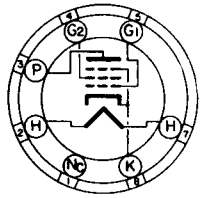


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
9.4 VOLTS 0.6 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
INTERMEDIATE SHELL
8 PIN BASE
7S

THE 9EF6 IS A BEAM POWER PENTODE DESIGNED FOR USE AS A VERTICAL DEFLECTION AMPLIFIER IN WIDE ANGLE TELEVISION RECEIVERS. THERMAL CHARACTERISTICS OF THE HEATER ARE CONTROLLED SUCH THAT HEATER VOLTAGE SURGES DURING THE WARM-UP CYCLE ARE MINIMIZED PROVIDED IT IS USED WITH OTHER TYPES WHICH ARE SIMILARLY CONTROLLED.

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD

GRID #1 TO PLATE	0.8	μμf
GRID #1 TO CATHODE GRID #3, GRID #2, HEATER	11.5	μμf
PLATE TO CATHODE GRID #3, GRID #2, HEATER	9.0	μμf

RATINGS
INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM
VERTICAL DEFLECTION AMPLIFIER - PENTODE CONNECTED

HEATER VOLTAGE	9.4	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:		
HEATER POSITIVE WITH RESPECT TO CATHODE		
TOTAL DC AND PEAK	200	VOLTS
DC	100	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE		
TOTAL DC AND PEAK	200	VOLTS
MAXIMUM PLATE VOLTAGE	250	VOLTS
MAXIMUM GRID #2 VOLTAGE	250	VOLTS
MAXIMUM PEAK POSITIVE PULSE PLATE VOLTAGE (ABS. MAX.)[A]	2 000	VOLTS
MAXIMUM PLATE DISSIPATION	10	WATTS
MAXIMUM PEAK NEGATIVE PULSE GRID #1 VOLTAGE	250	VOLTS
MAXIMUM GRID #2 DISSIPATION	2.0	WATTS
MAXIMUM AVERAGE CATHODE CURRENT	60	MA.
MAXIMUM PEAK CATHODE CURRENT	180	MA.
MAXIMUM GRID #1 CIRCUIT RESISTANCE (Rk=100 OHMS MIN.)[B]	2.2	MEGOHMS
HEATER WARM-UP TIME (APPROX.)*	11.0	SECONDS

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

HEATER VOLTAGE	9.4	VOLTS
HEATER CURRENT	0.6	AMP.
PLATE VOLTAGE	250	VOLTS
GRID #2 VOLTAGE	250	VOLTS
GRID #1 VOLTAGE	−18	VOLTS
PLATE CURRENT	50	MA.
GRID #2 CURRENT	2	MA.
TRANSCONDUCTANCE	5 000	μMHOS
GRID #1 VOLTAGE (APPROX.) FOR I_b=1 MA.	−40	VOLTS
PLATE CURRENT FOR E_b= 75V, E_{c2}=250V, E_{c1} =0 [C]	170	MA.
SCREEN CURRENT E_b= 75V, E_{c2}=250V, E_{c1} =0 [C]	17	MA

[A] THE DURATION OF THE VOLTAGE PULSE MUST NOT EXCEED 15% OF ONE SCANNING SYSTEM WHICH IS 2.5 MILLISECONDS IN A 525-LINE, 30-FRAME.

[B] IN THE CASE OF GRID RESISTOR BIAS SOME PROTECTION IS NECESSARY FOR THE TUBE IN THE NO DRIVE CONDITIONS.

[C] INSTANTANEOUS VALUES.

*HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH 80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATING RESISTANCE.

SIMILAR TYPE REFERENCE: *Except for heater ratings, and heater warm-up time the 9EF6 is identical to the 6EF6.*

Except for heater ratings, it is identical to the 12EF6.