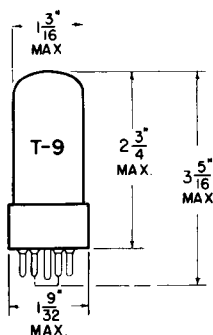
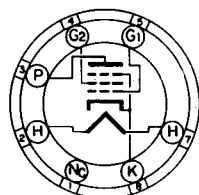


TUNG-SOL**BEAM POWER PENTODE****GLASS VIEW**

COATED UNIPOTENTIAL CATHODE

HEATER
12.6 VOLTS 0.6 AMP.
AC OR DC

ANY MOUNTING POSITION

**BOTTOM VIEW**

SHORT INTERMEDIATE SHELL
8 PIN OCTAL

75

THE 12EN6 IS A BEAM POWER PENTODE DESIGNED FOR USE AS A VERTICAL DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS SWEEP CIRCUITS. 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

GRID TO PLATE	0.65	μf
INPUT	14	μf
OUTPUT	8.0	μf

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM
VERTICAL DEFLECTION AMPLIFIER SERVICE ^A

	TRIODE CONNECTION ^B	PENTODE CONNECTION	
HEATER VOLTAGE	12.6	12.6	VOLTS
MAXIMUM DC PLATE VOLTAGE	300	300	VOLTS
MAXIMUM PEAK POSITIVE PULSE PLATE VOLTAGE	1200	1200	VOLTS
MAXIMUM PLATE DISSIPATION ^C	7.5	7.0	WATTS
MAXIMUM PEAK NEGATIVE GRID #1 VOLTAGE	250	250	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	---	150	VOLTS
MAXIMUM GRID #2 DISSIPATION	---	1.25	WATTS
MAXIMUM AVERAGE CATHODE CURRENT	50	50	MA.
MAXIMUM PEAK CATHODE CURRENT	175	175	MA.
MAXIMUM GRID #1 CIRCUIT RESISTANCE	2.2	2.2	MEGOHMS
MAXIMUM HEATER-CATHODE VOLTAGE			
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC COMPONENT	100		VOLTS
TOTAL DC & PEAK	200		VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE			
DC COMPONENT	200		VOLTS
TOTAL DC & PEAK	300		VOLTS
HEATER WARM-UP TIME (APPROX.)*	11.0		SECONDS

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

VERTICAL DEFLECTION AMPLIFIER SERVICE^A

HEATER VOLTAGE		12.6	VOLTS
HEATER CURRENT		0.6±6%	AMP.
PLATE VOLTAGE	50	200	VOLTS
GRID #2 VOLTAGE	110	110	VOLTS
GRID #1 VOLTAGE	0 ^D	-9.5	VOLTS
PLATE CURRENT	135	50	MA.
GRID #2 CURRENT	18	2.2	MA.
PLATE RESISTANCE		28 000	OHMS
TRANSCONDUCTANCE		8 000	μMHOS
GRID #1 CUTOFF VOLTAGE (APPROX.)		-35	VOLTS

^A FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCAST STATIONS: FEDERAL COMMUNICATIONS COMMISSION", THE DUTY CYCLE OF THE VOLTAGE PULSE MUST NOT EXCEED 15% OF ONE SCANNING CYCLE.

^B WITH GRID #2 TIED TO PLATE.

^C IN STAGES OPERATING WITH GRID LEAK BIAS, AN ADEQUATE CATHODE BIAS RESISTOR OR OTHER SUITABLE MEANS IS REQUIRED TO PROTECT THE TUBE IN THE ABSENCE OF EXCITATION.

^D APPLIED FOR SHORT INTERVAL (2 SECONDS MAXIMUM) SO AS NOT TO DAMAGE THE TUBE.

* 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.