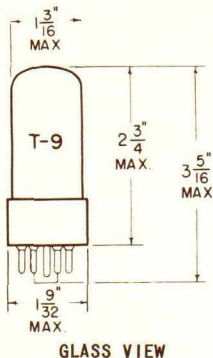


TUNG-SOL

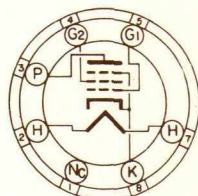
BEAM POWER PENTODE



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	$\mu\mu\text{f}$
INPUT	14	$\mu\mu\text{f}$
OUTPUT	8.0	$\mu\mu\text{f}$

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	MEG OHMS
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 μ MHOS
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.