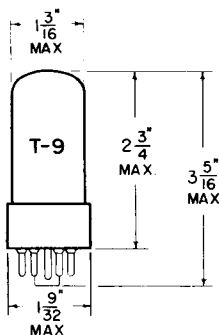


TUNG-SOL

DIODE



GLASS BULB

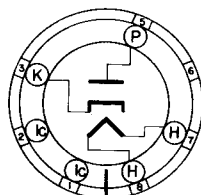
UNIPOTENTIAL CATHODE

HEATER

25.0 VOLTS 0.30 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW •

INTERMEDIATE SHELL
ORSHORT INTERMEDIATE SHELL
8 PIN OCTAL

4CG

THE 25D4 IS AN INDIRECTLY-HEATED HALF WAVE RECTIFIER DESIGNED FOR SERVICE AS A DAMPING DIODE IN HORIZONTAL DEFLECTION CIRCUITS OF 600 MA. SERIES HEATER OPERATED 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 — APPROX.

HEATER TO CATHODE	3.0	$\mu\mu\text{f}$
PLATE TO CATHODE & HEATER ^A	6.0	$\mu\mu\text{f}$
CATHODE TO PLATE & HEATER ^A	8.0	$\mu\mu\text{f}$

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM — UNLESS OTHERWISE INDICATED

DAMPER SERVICE^B

HEATER VOLTAGE	25.0	VOLTS
HEATER CURRENT	0.30	AMP.
MAXIMUM HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE		
DC	900	VOLTS
TOTAL DC AND PEAK	4 400	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		
DC	100	VOLTS
TOTAL DC AND PEAK	300	VOLTS
MAXIMUM PEAK INVERSE VOLTAGE	4 400	VOLTS
MAXIMUM DC PLATE CURRENT	155	MA.
MAXIMUM DC PLATE CURRENT (DESIGN CENTER SYSTEM)	145	MA.
MAXIMUM PEAK PLATE CURRENT	900	MA.
MAXIMUM PLATE DISSIPATION	5.5	WATTS
TUBE VOLTAGE DROP WITH $I_b = 250$ MA.	22	VOLTS
HEATER WARM-UP TIME (APPROX.) [*]	11.0	SECONDS

• PINS 1, 2, 4, & 6 MUST NOT BE USED AS TIE POINTS.

^A TIE UNUSED PINS AND METAL PART TO HEATER.

^B 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 OF THE HORIZONTAL VOLTAGE PULSE NOT TO EXCEED 15% OF ONE SCANNING CYCLE.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

* 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.

DESIGN-MAXIMUM RATINGS ARE THE LIMITING VALUES EXPRESSED WITH RESPECT TO BOGIE TUBES AT WHICH SATISFACTORY TUBE LIFE CAN BE EXPECTED TO OCCUR. TO OBTAIN SATISFACTORY CIRCUIT PERFORMANCE, THEREFORE, THE EQUIPMENT DESIGNER MUST ESTABLISH THE CIRCUIT DESIGN SO THAT NO DESIGN-MAXIMUM VALUE IS EXCEEDED WITH A BOGIE TUBE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, AND ENVIRONMENTAL CONDITIONS.