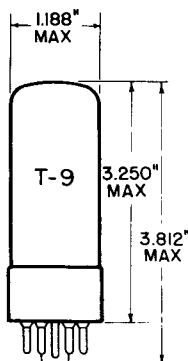


## TUNG-SOL

## HALF-WAVE VACUUM RECTIFIER



GLASS BULB  
JEDEC GROUP 1 B5-85  
SHORT  
INTERMEDIATE-SHELL  
5 PIN OCTAL  
WITH EXTERNAL BARRIERS  
PINS 1, 4, & 6 ARE OMITTED  
OUTLINE DRAWING  
JEDEC 9-44

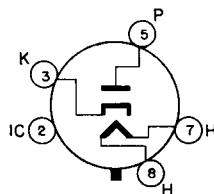
UNIPOTENTIAL CATHODE

HEATER

17.0 VOLTS  $500 \pm 40$  MA. ←

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

BASING DIAGRAM  
JEDEC 4CG

THE 17DE4 IS A HALF-WAVE VACUUM RECTIFIER OF THE GLASS-OCTAL TYPE. IT IS DESIGNED SPECIFICALLY FOR USE AS A DAMPER DIODE IN HORIZONTAL-DEFLECTION CIRCUITS OF BLACK-AND-WHITE TELEVISION RECEIVERS.

EXCEPT FOR HEATER RATINGS AND HEATER WARM-UP TIME, THE 17DE4 IS IDENTICAL TO THE 6DE4 AND 22DE4.

### DIRECT INTERELECTRODE CAPACITANCES - APPROX.

WITHOUT EXTERNAL SHIELD

|                             |      |    |
|-----------------------------|------|----|
| PLATE TO HEATER AND CATHODE | 8.5  | pf |
| CATHODE TO HEATER AND PLATE | 11.5 | pf |
| HEATER TO CATHODE           | 4    | pf |

### RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM

#### DAMPER SERVICE

|                                         |                   |         |
|-----------------------------------------|-------------------|---------|
| MAXIMUM PEAK INVERSE PLATE VOLTAGE      | 550C <sup>A</sup> | VOLTS   |
| MAXIMUM PEAK PLATE CURRENT              | 1100              | MA.     |
| MAXIMUM DC PLATE CURRENT                | 180               | MA.     |
| MAXIMUM PLATE DISSIPATION               | 6.5               | WATTS   |
| MAXIMUM PEAK HEATER-CATHODE VOLTAGE:    |                   |         |
| HEATER NEGATIVE WITH RESPECT TO CATHODE | 5500B             | VOLTS   |
| HEATER POSITIVE WITH RESPECT TO CATHODE | 300C              | VOLTS   |
| HEATER WARM-UP TIME (APPROX.)*          | 11.0              | SECONDS |

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

NOTES

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 THE DC COMPONENT MUST NOT EXCEED 900 VOLTS.

C THE DC COMPONENT MUST NOT EXCEED 100 VOLTS.

\* 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.

