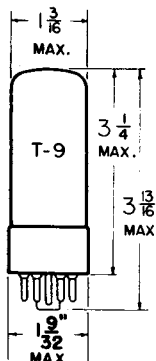


**TUNG-SOL**

**DIODE**



**GLASS BULB**

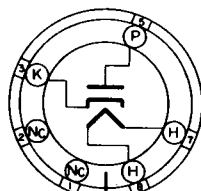
COATED UNIPOTENTIAL CATHODE

HEATER

18.9 VOLTS 0.6 AMP.

AC OR DC

ANY MOUNTING POSITION



**BOTTOM VIEW**

SHORT INTERMEDIATE SHELL 5 OR 6 PIN OCTAL

SOCKET TERMINALS #1, #2, #4 AND #6 SHOULD NOT BE USED AS TIE POINTS. PIN #1 OMITTED ON 5-PIN BASE.

4CG

THE 19AU4 AND 19AU4GTA ARE SINGLE INDIRECTLY-HEATED DIODES INTENDED FOR USE IN TELEVISION HORIZONTAL FREQUENCY DAMPER SERVICE. THEY ARE DESIGNED TO WITHSTAND HIGH VOLTAGE PULSES OF LINE FREQUENCY BETWEEN CATHODE AND BOTH HEATER AND PLATE ELEMENTS SUCH AS ARE NORMALLY ENCOUNTERED IN "DIRECT DRIVE" CIRCUITS. EXCEPT FOR THE HIGHER MAXIMUM DC OUTPUT CURRENT AND PEAK PLATE CURRENT OF THE 19AU4GTA, THE TWO TUBES ARE IDENTICAL.

**DIRECT INTERELECTRODE CAPACITANCES °**

HEATER TO CATHODE: (H TO K)	4.0	µuf
PLATE TO CATHODE AND HEATER: P TO (H+K)	8.5	µuf
CATHODE TO PLATE AND HEATER: K TO (P+H)	11.5	µuf

**RATINGS**

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

**DAMPER DIODE<sup>B</sup>**

HEATER VOLTAGE	18.9	VOLTS
MAXIMUM HEATER CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE		
DC	900	VOLTS
TOTAL DC AND PEAK (ABSOLUTE MAXIMUM)	4 500	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		
DC	100	VOLTS
TOTAL DC AND PEAK	300	VOLTS
MAXIMUM PEAK INVERSE PLATE VOLTAGE (ABSOLUTE MAXIMUM)	4 500	VOLTS
MAXIMUM DC PLATE CURRENT	190 <sup>A</sup>	MA.
MAXIMUM STEADY STATE PEAK PLATE CURRENT	1 150	MA.
MAXIMUM PLATE DISSIPATION	6.0	WATTS
AVERAGE TUBE VOLTAGE DROP (WITH TUBE CONDUCTING 350 MA.)	25	VOLTS
HEATER WARM-UP TIME (APPROX.) <sup>*</sup>	11.0	SECONDS

<sup>B</sup> FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCASTING STATIONS; FEDERAL COMMUNICATIONS COMMISSION". THE DUTY CYCLE OF THE HORIZONTAL VOLTAGE PULSE, NOT TO EXCEED 15% OF SCANNING CYCLE.

<sup>\*</sup> 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.

<sup>A</sup> VALUES FOR 19AU4GTA.

<sup>•</sup> WITHOUT EXTERNAL SHIELD.

