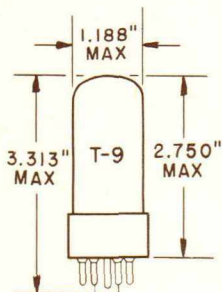


TUNG-SOL

DIODE

MINIATURE TYPE

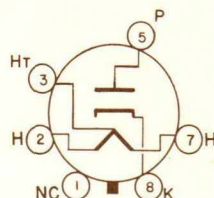


GLASS BULB

INTERMEDIATE SHELL
6 PIN OCTAL B6-8
OUTLINE 9-11
SHORT INTERMEDIATE SHELL
6 PIN OCTAL B6-60
OUTLINE 9-41

FOR USE AS A POWER
RECTIFIER IN AC/DC RECEIVERS

COATED UNIPOTENTIAL CATHODE
ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 6AD

THE HEATER SECTION
CONNECTED BETWEEN
PINS 2 & 3 IS DESIGNED
AS SHUNT FOR PILOT LIGHT

THE 35Z5GT IS DESIGNED FOR USE AS A RECTIFIER IN AC-DC RECEIVERS. IT FEATURES A 35 VOLT 150 MA. HEATER HAVING A TAP BROUGHT OUT SO THAT WITH PROPER EXTERNAL CONNECTIONS, THE SHORT SECTION OF THE HEATER SERVES AS A BALLAST RESISTOR FOR A PANEL LAMP. IT IS RECOMMENDED THAT THE PLATE CURRENT OF THE RECTIFIER BE PASSED THROUGH THE PANEL LAMP IN PARALLEL WITH THE SHORT SECTION OF THE HEATER, WHICH IS ACCOMPLISHED BY CONNECTING THE PLATE OF THE RECTIFIER TO THE TAP ON THE HEATER.

HEATER CHARACTERISTICS AND RATINGS

DESIGN CENTER VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS

PINS 2 AND 7	35	VOLTS	150	MA.
VOLTAGE BETWEEN PINS 2 AND 3			7.5	VOLTS
LIMITS OF SUPPLIED CURRENT			150±10	M.A.
MAXIMUM HEATER-CATHODE VOLTAGE:			350	VOLTS

MAXIMUM RATINGS

DESIGN CENTER VALUES - SEE EIA STANDARD RS-239

AC PLATE VOLTAGE, RMS	235	VOLTS
PEAK INVERSE VOLTAGE	700	VOLTS
STEADY STATE PEAK PLATE CURRENT	600	MA.
PANEL LAMP SECTION RMS, VOLTAGE WHEN PANEL LAMP FAILS	15	VOLTS
STEADY-STATE DC OUTPUT CURRENT:		
WITH PANEL LAMP AND NO SHUNTING RESISTOR	60	MA.
WITH PANEL LAMP AND SHUNTING RESISTOR	90	MA.
WITHOUT PANEL LAMP	100	MA.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

MAXIMUM RATINGS - CONT'D.

DESIGN CENTER VALUES - SEE EIA STANDARD RS#239

VALUE OF PANEL LAMP SHUNTING RESISTOR:

FOR DC OUTPUT CURRENT OF 70 MA.	800	OHMS
FOR DC OUTPUT CURRENT OF 80 MA.	400	OHMS
FOR DC OUTPUT CURRENT OF 90 MA.	250	OHMS

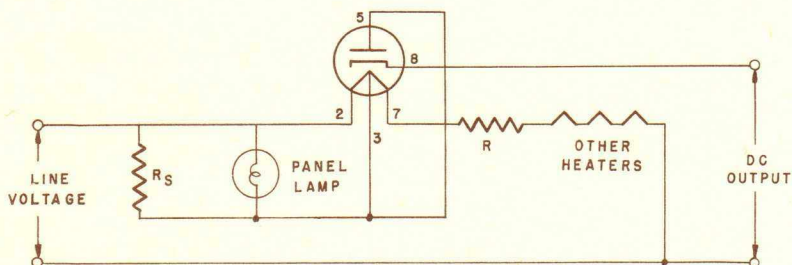
TUBE VOLTAGE DROP WITH TUBE CONDUCTING 200 MA
DC PLATE CURRENT

18 VOLTS

TYPICAL OPERATING CHARACTERISTICS

WITH #40 OR #47 PANEL LAMP IN CIRCUIT WITH CAPACITOR INPUT TO FILTER

AC PLATE SUPPLY VOLTAGE, RMS	117	117	117	117	235	VOLTS
FILTER INPUT CAPACITOR	40	40	40	40	40	μf
MINIMUM TOTAL EFFECTIVE PLATE SUPPLY IMPEDANCE	15	15	15	15	100	OHMS
PANEL LAMP SHUNTING RESISTOR	-----	300	150	100	-----	OHMS
DC OUTPUT CURRENT	60	70	80	90	60	MA.



DROP ACROSS R AND ALL HEATERS (WITH PANEL LAMP) SHOULD EQUAL THE LINE VOLTAGE AT 0.15 AMPERE.

 R_s = SHUNTING RESISTOR REQUIRED WHEN DC OUTPUT CURRENT EXCEEDS 60 MILLIAMPERES.

HALF-WAVE RECTIFIER - CAPACITOR INPUT TO FILTER

WITHOUT PANEL LAMP

AC PLATE SUPPLY VOLTAGE, RMS	117	235	VOLTS
FILTER INPUT CAPACITOR	40	40	μf
MINIMUM TOTAL EFFECTIVE PLATE SUPPLY IMPEDANCE	15	100	OHMS
DC OUTPUT VOLTAGE AT INPUT TO FILTER (APPROX.):			
AT 50 MA. (HALF LOAD)	140	280	VOLTS
AT 100 MA (FULL LOAD)	120	235	VOLTS
DIFFERENCE (VOLTAGE REGULATION)	20	45	VOLTS
PERCENTAGE REGULATION	14	16	PERCENT
DC OUTPUT CURRENT	100	100	MA.

