MECHANICAL DATA

Bulb ................................................. T-9
Base ................................................. B8-26, Small Wafer Octal with Sleeve, 8-Pin or
Low Loss Phenolic Small Wafer Octal with
External Barriers and Sleeve, 8-Pin
Outline ................................................. 9-12
Basing ................................................. 8N
Cathode ............................................. Coated Unipotential
Mounting Position ................................. Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage ...................................... 6.3 (±5%) Volts
Heater Current ...................................... 800 Ma
Maximum Heater-Cathode Voltage
Heater Negative with Respect to Cathode .... 200 Volts
Heater Positive with Respect to Cathode ... 25 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid No. 1 to Plate ................................ 0.70 μF
Grid No. 3 to Plate ................................ 3.80 μF
Grid No. 1 Input: g1 to (g2+g3+p+h+k) ... 12.0 μF
Grid No. 3 Input: g3 to (g2+g1+p+h+k) ... 6.0 μF
Output: p to (g1+g2+g3+h+k) .................. 6.5 μF
Grid No. 1 to Grid No. 3 ....................... 0.65 μF

RATINGS (Absolute Maximum)

DC Plate Voltage .................................. 250 Volts Max.
Positive DC Grid No. 3 Voltage .............. 250 Volts Max.
Negative DC Grid No. 3 Voltage ............. 250 Volts Max.
Positive DC Grid No. 2 Voltage .............. 150 Volts Max.
Negative DC Grid No. 1 Voltage ............. 100 Volts Max.
Peak Positive Plate Voltage ................. 500 Volts Max.
Peak Positive Grid No. 1 Voltage ............ 30 Volts Max.
Peak Positive Grid No. 2 Voltage ............ 150 Volts Max.
Plate Dissipation .................................. 8.0 Watts Max.
Grid No. 2 Dissipation ......................... 2.0 Watts Max.
Grid No. 3 Dissipation ......................... 2.0 Watts Max.
DC Cathode Current .............................. 80 Ma Max.
Peak Cathode Current ............................ 600 Ma Max.
Positive DC Grid No. 1 Current .............. 5.0 Ma Max.
External Grid No. 1 Circuit Resistance .... 0.5 Megohm Max.
Fixed Bias Operation ........................... 0.5 Megohm Max.
Bulb Temperature (Hottest Point) .......... 130 Degrees C

QUICK REFERENCE DATA

The Sylvania Type 6888 is a dual control, computer pentode designed for long life and low failure rates. It is utilized in pulse amplifier, core driver and coincidence circuits.
AVERAGE CHARACTERISTICS

Plate Voltage ............................................ 150 Volts
Grid No. 3 Voltage ........................................ 0 Volts
Grid No. 2 Voltage ........................................ 90 Volts
Grid No. 1 Voltage ........................................ 37.5 Ma
Plate Current ............................................ 19 Ma
Grid No. 2 Current ........................................ 37.5 Ma
Grid No. 1 Cutoff Voltage
  Eb = 150 Vdc; Ec2 = 90 Vdc; Ec3 = 0; Ecl/Ib = 30 μa .. -13.8 Volts
Grid No. 1 Cutoff Voltage
  Eb = 150 Vdc; Ec2 = 90 Vdc; Ec3 = 0; Ecl/Ib = 2.5 ma .. -9.4 Volts
Grid No. 3 Cutoff Voltage
  Eb = 150 Vdc; Ec1 = 0; Ec2 = 90 Vdc; Ec3/Ib = 2.0 ma .. -8.6 Volts

Triode Amplification Factor
  Eb = Ec2 = 90 Vdc; Plate and Grid No. 2 Tied;
  Ec1 = -2.0 Vdc; Ec3 = 0 .............................. 10

Tetrode Cutoff Voltage
  Eb = Ec3 = 250 Vdc; Grid No. 3 and Plate Tied;
  Ec2 = 90 Vdc; Ecl/Ib = 2.0 ma .......................... -11.5 Volts

Pulse Plate Current
  Eb = 150 Vdc; Ec2 = 90 Vdc; Ec3 = +10 Vdc; Ecl = +10 v
  tp = 5 μsec; prr = 2000 pps .......................... 145 Ma

Pulse Screen Current
  Eb = 150 Vdc; Ec2 = 90 Vdc; Ec3 = +10 Vdc; Ecl = +10 v
  tp = 5 μsec; prr = 2000 pps .......................... 17 Ma

NOTES:

1. *This rating applies to a current pulse whose duration is 0.1 μsec, whose duty factor is 20% and the averaging time of which is 1.0 milsec.*

2. *Tie grid No. 1 to +90 Vdc through a 0.47 megohm resistor.*
AVERAGE PLATE CHARACTERISTICS

\[ E_f = \text{RATED VALUE} \]
\[ E_{C3} = 0 \text{ VOLTS} \]
\[ E_{C1} = 0 \text{ VOLTS} \]

CURRENT IN MA

PLATE VOLTAGE
AVERAGE PLATE CHARACTERISTICS

\[ E_f = \text{RATED VALUE} \]
\[ E_{C2} = 90 \text{ VOLTS} \]
\[ E_{C3} = 0 \text{ VOLTS} \]
AVERAGE PLATE CHARACTERISTICS

$E_f = \text{Rated Value}$

$E_{C2} = 90 \text{ Volts}$

$E_{CI} = 0 \text{ Volts}$
AVERAGE TRANSFER CHARACTERISTICS

\[ E_f = \text{RATED VALUE} \]
\[ E_{C3} = 0 \text{ VOLTS} \]
\[ E_b = 150 \text{ VOLTS} \]
AVERAGE TRANSFER CHARACTERISTICS

$E_f = $ RATED VALUE
$E_b = 150$ VOLTS
$I_C = 0$ VOLTS

CURRENTS IN MA

GRID NO. 3 VOLTAGE
AVERAGE TRANSFER CHARACTERISTICS

$E_f =$ RATED VALUE
$E_b =$ 150 VOLTS
$E_{C1} =$ 0 VOLTS

CURRENTS IN MA

GRID NO 3 VOLTAGE
AVERAGE CHARACTERISTICS

$E_f =$ RATED VALUE
$E_{Cl} =$ 0 VOLTS
$E_{C2} =$ 90 VOLTS
$E_{C3} =$ 0 VOLTS

CURRENT ($I_{C2}$) IN mA

CURRENT ($I_{C1}$) IN mA

PLATE VOLTAGE

$E_{Cl} =$ 5 VOLTS

$E_{C3} =$ 10 VOLTS

$I_{C3}$