

SYLVANIA **TYPE 6110****JETEC Registration Data****DOUBLE DIODE**

The Type 6110 is a subminiature double diode designed for use as a low current power supply rectifier. This type is characterized by long life and stable performance. It is designed for service where severe conditions of mechanical shock and vibration are encountered, and it is suitable for high operating temperatures.

————MECHANICAL DATA————

GENERAL

Style subminiature
Cathode coated unipotential
Bulb T-3
Base E8-10, Subminiature Button
Flexible Leads

Basing 8DJ

Connections:

Lead 1 - #2 plate
Lead 2 - #2 cathode
Lead 3 - heater
Lead 4 - internal shield
Lead 5 - #1 plate
Lead 6 - heater
Lead 7 - #1 cathode
Lead 8 - no connection

Outline 3-1
Maximum Bulb Diameter 0.400 inch
Maximum Overall Bulb Length 1.375 inches
Maximum Lead Length 1.500 inches
Mounting Position any

RATINGS(1)

Maximum Impact Acceleration(2) ... 450 g
Maximum Uniform Acceleration(3).. 1,000 g
Maximum Vibrational Acceleration
for Extended Periods(4) 2.5 g
Maximum Bulb Temperature 250 °C

————ELECTRICAL DATA————

GENERAL

Plate Current for 10 Volts Tube
Voltage Drop (each plate) 15 ma

Direct Interelectrode Capacitances:

Not Shielded Shielded(5)

Plate to Plate, max... 0.15 0.026 μ f

Input(6) (each section) 1.5 2.2 μ f

Cathode to All Other Electrodes(7) (each section) 2.6 2.6 μ f

Heater Voltage (ac or dc) 6.3 volts
Heater Current 150 ma

RATINGS(1)-Absolute Values

Heater Voltage (ac or dc).. 6.3(±5%) volts
Maximum Plate Supply Voltage
(ac) (each plate) 165 volts
Maximum Peak Inverse
Plate Voltage 460 volts

Maximum Peak Plate Current:

Steady State (each plate) ... 26.5 ma
Transient (each plate) 160 ma
Maximum Output Current
(dc) (each plate) 4.4 ma
Maximum Heater Cathode
Voltage ±360 volts

TYPICAL OPERATION

Full-Wave Rectifier
(Capacitor Input to Filter)

Heater Voltage 6.3 volts
Plate Voltage (ac)
(each plate) 150 volts
Filter Input Capacitance 8 μ f
Effective Plate Supply
Impedance 1,500 ohms
Output Current (dc) 8 ma
Life Expectancy:
30°C Ambient Temperature... 5,000 hours
175°C Ambient Temperature.. 1,000 hours

(See Page 2 for notes)

Notes

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| (1) Limitations beyond which normal tube performance and tube life may be impaired. | (5) With external shield of 0.405 inch diameter connected to heater. |
| (2) Forces in any direction as applied by the Navy Type High Impact (Flyweight) Shock Machine for Electronic Devices, or equivalent. | (6) Plate to cathode, heater, internal shield and external shield. |
| (3) Forces in any direction applied gradually, as in centrifuge. | (7) Cathode to heater, plate, internal shield and external shield. |
| (4) Vibrational forces in any direction at 60 cycles per second for a period exceeding 100 hours. | (8) Tube life and reliability of performance are directly related to the degree of regulation of the heater voltage to its center-rated value of 6.3 volts. |