



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:

	<u>Not Shielded</u>	<u>Shielded(5)</u>
Plate to Plate, max...	0.15	0.026 $\mu\mu\text{f}$
Input(6) (each section)	1.5	2.2 $\mu\mu\text{f}$
Cathode to All Other Electrodes(7) (each section)	2.6	2.6 $\mu\mu\text{f}$

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 μf
 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

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