TWIN DIODE
SUBMINIATURE

COATED UNIPOTENTIAL CATHODE
RUGGEDIZED LOW CURRENT POWER SUPPLY RECTIFIER
ANY MOUNTING POSITION

GLASS BULB
SUBMINIATURE BUTTON
FLEXIBLE LEADS
BASE - EB-10
OUTLINE DRAWING
JEDEC 3-1

THE 6110 IS A TWIN DIODE RECTIFIER IN THE 8 PIN SUBMINIATURE CONSTRUCTION. THIS TYPE IS CHARACTERIZED BY LONG LIFE AND STABLE PERFORMANCE. IT IS SUITABLE FOR HIGH OPERATING TEMPERATURES AND WHERE SEVERE CONDITIONS OF MECHANICAL SHOCK AND VIBRATION ARE ENCOUNTERED.

DIRECT INTERELECTRODE CAPACITANCES

<table>
<thead>
<tr>
<th></th>
<th>WITHOUT SHIELD</th>
<th>WITH SHIELD</th>
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<tbody>
<tr>
<td>PLATE TO PLATE, (MAX.)</td>
<td>0.15</td>
<td>0.026 pf</td>
</tr>
<tr>
<td>INPUT (EACH UNIT) (P TO K†H†I.S.(Q.B.))</td>
<td>1.5</td>
<td>2.2 pf</td>
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<tr>
<td>CATHODE TO ALL OTHER ELECTRODES (EACH UNIT)</td>
<td>2.6</td>
<td>2.6 pf</td>
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</tbody>
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*A WITH EXTERNAL SHIELD OF 0.405 INCH DIAMETER CONNECTED TO HEATER.

HEATER CHARACTERISTICS AND RATINGS

ABSOLUTE VALUES

AVERAGE CHARACTERISTICS
6.3 Volts
150 MA.

HEATER SUPPLY LIMITS:
VOLTAGE OPERATION
6.3±0.315 Volts
±360 Volts

MAXIMUM RATINGS
MECHANICAL

MAXIMUM IMPACT ACCELERATIONb
450 G

MAXIMUM UNIFORM ACCELERATIONe
1000 G

MAXIMUM VIBRATIONAL ACCELERATION FOR EXTENDED PERIODS
2.5 G

MAXIMUM BULB TEMPERATURE
250 °C

CONTINUED ON FOLLOWING PAGE
MAXIMUM RATINGS

ABSOLUTE VALUES

PLATE SUPPLY VOLTAGE (AC) (EACH UNIT) 165 VOLTS
PEAK INVERSE PLATE VOLTAGE 460 VOLTS
PEAK PLATE CURRENT:
   STEADY STATE (EACH UNIT) 26.5 MA.
   TRANSIENT (EACH UNIT) 160 MA.
OUTPUT CURRENT (DC) (EACH UNIT) 4.4 MA.

TYPICAL OPERATING CHARACTERISTICS
FULL-WAVE RECTIFIER
(CAPACITOR INPUT TO FILTER)

PLATE VOLTAGE (AC) (EACH UNIT) 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
   475°C AMBIENT TEMPERATURE 1 000 HOURS
AVG. DIODE CURRENT (EACH UNIT) AT 60 VOLTS DC 15 MA.

1. Forces in any direction as applied by the Navy Type High Impact (flyweight) shock machine for electronic devices, or equivalent.

2. Forces in any direction applied gradually, as in centrifuge.

3. Vibrational forces in any direction at 60 cycles per second for a period exceeding 100 hours.

4. Limitations beyond which normal tube performance and tube life may be impaired.

5. 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.