BOOSTER DIODE for time base circuits in television receivers

MECHANICAL DATA

Cathode: Coated unipotential
Base: E9-1
Bulb: T6½
Top cap: C1-2
RETMA basing designation: 9 CB
Mounting position: Any

TUBE OUTLINE
OF BASE

TUBE OUTLINE

BOTTOM VIEW

BASE PIN
No
1 Not to be connected
2 Not to be connected
3 Not to be connected
4 Heater
5 Heater
6 Not to be connected
7 Not to be connected
8 Not to be connected
9 Plate
Top cap Cathode

ELECTRICAL DATA

Heater data

Heater voltage: 6.3 volts
Heater current: 0.81 amp

DIRECT INTERELECTRODE CAPACITANCES

Plate to all other elements: 6.4 μF
Heater to cathode: 2.5 μF

May 22, 1956
**MAXIMUM RATINGS** (Design center values)

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate current</td>
<td>150 mamps</td>
</tr>
<tr>
<td>Peak plate current</td>
<td>450 mamps</td>
</tr>
<tr>
<td>Booster condenser</td>
<td>4 µF</td>
</tr>
<tr>
<td>Voltage between heater and cathode</td>
<td>600 volts¹)</td>
</tr>
</tbody>
</table>

**During flyback**

<table>
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<tr>
<th>Component</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Peak voltage between cathode and heater (cathode positive)</td>
<td>4500 volts²)⁴)</td>
</tr>
<tr>
<td>Peak voltage between cathode and plate (cathode positive)</td>
<td>4500 volts²)⁴)</td>
</tr>
<tr>
<td>Peak voltage between heater and plate (heater positive)</td>
<td>3000 volts³)⁴)</td>
</tr>
</tbody>
</table>

**Remark:** With regard to the long heating time of the 6R3, it is advisable to take measures that the screen grid dissipation of the tubes that derive their plate voltage from the booster is not exceeded during this heating time.

¹) Cathode positive with respect to heater. Averaging time max. 1 cycle of the line time base

²) Absolute maximum value 5600 volts

³) Absolute maximum value 3800 volts

⁴) Max. pulse duration 18% of one cycle of the line time base with a max. of 18 microseconds