



ELECTRONIC TUBE REFERENCE

6B7E

Voltage - Pentode or Tetrode (with diode) electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

DIODE-DIODE-PENTODE

Receiving tube combining radio signal detection or control-voltage rectification with associated voltage amplification. Its detector function is integral to receiver signal processing and supports classification within the radio detector/converter family.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Diode

No fixed ratings recorded.

First physical diode of Brimar 6B7E double-diode pentode, for radio detection and AVC/control-voltage rectification. Brimar explicitly identifies two diode sections and one pentode and refers to 6B8G for additional characteristics; no separate absolute diode electrical maximum established by attached Brimar document. Keep diode current and capacitance flags NULL/unchanged rather than infer from cross-reference.

SECTION2 Pentode	
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	125 V
MAXIMUM PLATE DISSIPATION	2.25 W
MAXIMUM SCREEN DISSIPATION	0.3 W
<p><i>Pentode section of Brimar 6B7E double-diode pentode for signal voltage amplification with associated radio detection and automatic volume control. Source refers to 6B8G for further electrical characteristics. Existing plate 300 V, screen 125 V, plate dissipation 2.25 W and screen dissipation 0.3 W preserved as previously sourced; no further maximum ratings or intrinsic gm inferred from related but distinct designation. Two separate physical diode sections retained.</i></p>	

SECTION3 Diode	
<p><i>No fixed ratings recorded.</i></p> <p><i>Second physical diode of Brimar 6B7E double-diode pentode, for receiver detector and AVC rectification applications. Manufacturer confirms double-diode plus pentode construction and references 6B8G for further information. This is a distinct physical diode, not compressed into first section; no unsupported voltage/current ratings promoted.</i></p>	

The BRIMAR 6B7E is a double-diode pentode with a 6.3 V, 0.3 A heater; the source explicitly refers to type 6B8G for further information.

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker