



ELECTRONIC TUBE REFERENCE

6AM6

Voltage Pentode - Sharp Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

High-slope miniature pentode for wideband RF, IF, and video-frequency amplification in communications and television equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7DB	BASE PINS	7
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode

PLATE RESISTANCE	1000000 Ω
TRANSCONDUCTANCE	0.0075 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM SCREEN DISSIPATION	0.8 W

Brimar 6AM6 (previously coded 8D3) indirectly heated high-slope sharp-cutoff B7G miniature RF pentode for RF/IF/video wideband amplification and television; usable as a frequency changer to about 100 MHz with external oscillator. Heater 6.3 V 0.3 A. Manufacturer rating differences: GE handbook gives max plate 300 V and max screen 250 V (existing promoted limits retained), while Brimar specifies max plate 275 V and max screen 275 V; do not silently merge competing manufacturer's rating systems. Max plate dissipation 2.5 W, screen dissipation 0.8 W. Typical at plate/screen 200 V, control grid -1.5 V, cathode resistor 135 Ω : plate 9 mA, screen 2.25 mA, gm 7.5 mA/V (0.0075 S), approximate rp 0.8 M Ω . Alternate at plate/screen 250 V, grid -2 V, cathode resistor 160 Ω : plate 10 mA, screen 2.6 mA, gm 7.3 mA/V, rp 1 M Ω . Inner amplification factor g1-to-g2 ~70; existing gm 0.0075 S, plate resistance 1 M Ω and mu 70 retained. Suppressor grid to cathode. Approximate cutoff control-grid -4.5 V at 200 V or -5.5 V at 250 V. Shielded capacitances input ~7.5 pF, output ~3.2 pF and grid-to-plate ~0.01 pF.

High-slope miniature RF pentode for wide-band RF, IF, and video-frequency service; formerly coded 8D3 and equivalent to CV138.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Brimar Radio Valve No 7

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1958 BRIMAR RADIO VALVE NO 7

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	—
Plate Current	10 mA	—
Screen Voltage	250 V	—
Screen Current	2.6 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	1 Mohm	—
Transconductance	7300 μ S	—
Amplification Factor	70	—
Frequency Changer Maximum	100 MHz	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

Published test conditions and operating points. Values on this page are preserved as reported by this source.

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	Published handbook rating
Maximum screen voltage	250 V	Published handbook rating
Plate voltage	250 V	ClassA
Screen voltage	250 V	ClassA
Control-grid bias	2 V	ClassA
Plate current	10 mA	ClassA
Screen current	2.5 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	1000000 ohm	Published handbook characteristic
Transconductance	7500 μS	Published handbook characteristic
Heater voltage	6.3 V	Published heater rating
Heater current	300 mA	Published heater rating