

ELECTRONIC TUBE REFERENCE

7R7

Voltage Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA
3 SECTIONS
CONSTRUCTION
DIODE-DIODE-PENTODE

Double-diode semi-variable-mu pentode for radio detector plus IF/LF amplifier service. The paired diodes provide detection and AVC while the controlled-cutoff pentode supports gain-regulated receiver amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Diode	
MAXIMUM HEATER-CATHODE VOLTAGE	90 V
Published promoted fields populated by semantic section ownership; identical repeated sections compressed.	

SECTION2 Pentode	
PLATE RESISTANCE	1000000 Ω
TRANSCONDUCTANCE	0.0034 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM SCREEN DISSIPATION	0.7 W
MAXIMUM HEATER-CATHODE VOLTAGE	90 V
<i>Published promoted fields populated by semantic section ownership; identical repeated sections compressed.</i>	

SECTION3 Diode	
<i>No fixed ratings recorded.</i>	
<i>Physical diode section added during approved section-structure reconciliation.</i>	

Double-diode RF pentode for detector plus IF/LF amplifier service; the pentode section has semi-variable-mu characteristics for AVC.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1948 Brimar Radio Valve Manual

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

1948 BRIMAR RADIO VALVE MANUAL

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	PentodeSection
Plate Current	5.7 mA	PentodeSection
Screen Voltage	100 V	PentodeSection
Screen Current	1.7 mA	PentodeSection
Control Grid Voltage	-1 V	PentodeSection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	1 Mohm	PentodeSection
Transconductance	3200 μ S	PentodeSection
Cutoff Grid Voltage	-20 V	PentodeSection



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 2 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cutoff characteristic	Semi-vari-mu	—

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Tung Sol

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

1961 TUNG SOL

Section 2 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PentodeTransconductance	3400 μ S	Section2
PentodePlateResistance	1000000 ohm	Section2