ELECTRONIC TUBE REFERENCE

7E7

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA
3 SECTIONS
CONSTRUCTION
DIODE-DIODE-PENTODE

Double-diode pentode combining radio detector and control-voltage rectification with RF, IF, or high-gain audio amplification, integrating multiple receiver signal-processing functions in one envelope.

General characteristics

BASE DESIGNATION	8AE	**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

No fixed ratings recorded.

Published promoted fields populated by semantic heading; identical repeated physical sections compressed.

SECTION2 Pentode

PLATE RESISTANCE	700000 Ω
TRANSCONDUCTANCE	0.001575 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	100 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM SCREEN DISSIPATION	0.3 W

Published promoted fields populated by semantic heading; identical repeated physical sections compressed.

SECTION3 Diode

No fixed ratings recorded.

Physical diode section added during approved section-structure reconciliation.

A Lock-In double-diode pentode for RF/IF amplification and high-gain audio amplification; translated from the French source.

SOURCE OPERATING CONDITIONS

1950 Sylvania

SOURCE PDF

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

1950 SYLVANIA

Section 2 · Pentode

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
HeaterVoltageNominal	**7 V**	Nominal
HeaterCurrentNominal	**320 mA**	Nominal
Plate Voltage	**250 V**	ClassA
Screen Voltage	**100 V**	ClassA

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

195X General Electric Essential Characteristics

SOURCE PDF

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195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 2 · Pentode

CAPACITANCE		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Input capacitance	**4.6 pF**	Section1
Output capacitance	**4.6 pF**	Section1
Grid-to-plate capacitance	**0.005 pF**	Section1

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Typical plate voltage	**250 V**	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical screen voltage	**100 V**	ClassA
Typical grid voltage	**-3 V**	ClassA
Typical plate current	**7.5 mA**	ClassA
Typical screen current	**1.6 mA**	ClassA

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	**700000 Ohm**	Section1
Transconductance	**1300 uS**	Section1

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 1 · Diode

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid To Plate Capacitance	**0.005 pF**	Pentode;Maximum
Diode1ToGridCapacitance	**0.013 pF**	Maximum
Diode2ToGridCapacitance	**0.003 pF**	Maximum

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