



ELECTRONIC TUBE REFERENCE

25Z6

Rectifier - Full Wave electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

RECTIFIER-RECTIFIER

Indirectly heated full-wave rectifier and voltage-doubler tube for transformerless receiver supplies. Rated for approximately 700 V peak inverse voltage and 85 mA nominal rectified output from a 25 V heater.

GENERAL CHARACTERISTICS

BASE DESIGNATION	70	BASE PINS	7
NOMINAL HEATER	25 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
PEAK INVERSE VOLTAGE	700 V
NOMINAL OUTPUT CURRENT	85 mA
PEAK FORWARD CURRENT	500 mA
FORWARD VOLTAGE DROP	22 V
MAXIMUM HEATER-CATHODE VOLTAGE	350 V
Published maximum ratings, representative operating conditions, rectifier service data, and capacitance columns reviewed.	

SECTION2 Rectifier	
PEAK INVERSE VOLTAGE	700 V
NOMINAL OUTPUT CURRENT	85 mA
PEAK FORWARD CURRENT	500 mA
FORWARD VOLTAGE DROP	22 V
MAXIMUM HEATER-CATHODE VOLTAGE	350 V
<i>Second physical rectifier section; electrical properties populated from corresponding identical section.</i>	

Full-wave rectifier and voltage-doubler tube.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1937 Raytheon Radio Receiving Tubes

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

1937 RAYTHEON RADIO RECEIVING TUBES

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	25 V	Published heater/filament rating
Heater/filament current	300 mA	Published heater/filament rating

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage-doubler RMS voltage per plate	125 V	VoltageDoubler
Voltage-doubler peak plate current	500 mA	VoltageDoubler
Voltage-doubler DC output current	85 mA	VoltageDoubler
Half-wave RMS voltage per plate without series resistor	125 V	HalfWave
Half-wave RMS voltage per plate with series resistor	250 V	HalfWave
Half-wave peak current per plate	500 mA	HalfWave
Half-wave DC output current per plate	85 mA	HalfWave

1937 RAYTHEON RADIO RECEIVING TUBES

Section 2 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	25 V	Published heater/filament rating
Heater/filament current	300 mA	Published heater/filament rating

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage-doubler RMS voltage per plate	125 V	VoltageDoubler
Voltage-doubler peak plate current	500 mA	VoltageDoubler
Voltage-doubler DC output current	85 mA	VoltageDoubler
Half-wave RMS voltage per plate without series resistor	125 V	HalfWave
Half-wave RMS voltage per plate with series resistor	250 V	HalfWave
Half-wave peak current per plate	500 mA	HalfWave
Half-wave DC output current per plate	85 mA	HalfWave



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1940 RCA

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

1940 RCA Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
arrangement. For voltage-doubler considerations, see page	25	arrangement. For voltage-doubler considerations, see page 25.
HEeATER VOLTAGE (A. C.or D.C)...evvvenn	25 V	HEeATER VOLTAGE (A. C.or D.C)...evvvenn.... 25 Volts
HEATER CURRENT ...cvverriunenecncncsnsnnoone	300 mA	HEATER CURRENT ...cvverriunenecncncsnsnnoone 0.3 Ampere
A-C PLATE VOLTAGE PER Prate (RMS)	125 V	A-C PLATE VOLTAGE PER Prate (RMS)..... 125 max. Volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PEAK PLATE CURRENT...cvtvacnoracannssnnnnas	500	PEAK PLATE CURRENT...cvtvacnoracannssnnnnas 500 max. Milliamperes
D-C OUTPUT CURRENT.cvervovsssnenancrcannnnns	85	D-C OUTPUT CURRENT.cvervovsssnenancrcannnnns 85 max. Milliamperes
A-C PLATE VOLTAGE PER PrLATE (RMS)	250 V	A-C PLATE VOLTAGE PER PrLATE (RMS)... 125 max. 250* max. Volts
Peax PLATE CURRENT PER PLATE	500	Peax PLATE CURRENT PER PLATE..... 500 max. 500 max. Milliamperes
D-C Output CURRENT PER PLATE	85	D-C Output CURRENT PER PLATE..... 85 max. 85 max. Milliamperes
* An a-c input voltage ter than	125 V	* An a-c input voltage ter than 125 volts requires the use of a series resistor or resistors.
A 100-ohm resistor in each p lead or a 100-ohm resistor comm	100 ohm	A 100-ohm resistor in each p lead or a 100-ohm resistor common to both plates (giving somewhat
The current in the heater circuit should be adjusted to	300 mA	The current in the heater circuit should be adjusted to 0.3 ampere for the normal
are shown on page	109	are shown on page 109. As a supplement to the curves with a-c input voltage, a
As a voltage doubler, the	25	As a voltage doubler, the 25Z6 is useful in “transformerless” receivers of the

1940 RCA

Section 2 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
arrangement. For voltage-doubler considerations, see page	25	arrangement. For voltage-doubler considerations, see page 25.
HEeATER VOLTAGE (A. C.or D.C)...evvvenn	25 V	HEeATER VOLTAGE (A. C.or D.C)...evvvenn.... 25 Volts
HEATER CURRENT ...cvverriunenecncncsnsnnoone	300 mA	HEATER CURRENT ...cvverriunenecncncsnsnnoone 0.3 Ampere
A-C PLATE VOLTAGE PER Prate (RMS)	125 V	A-C PLATE VOLTAGE PER Prate (RMS)..... 125 max. Volts
PEAK PLATE CURRENT...cvtvacnoracannssnnnnas	500	PEAK PLATE CURRENT...cvtvacnoracannssnnnnas 500 max. Milliamperes

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
D-C OUTPUT CURRENT.cvervovsssnenancrcannnns	85	D-C OUTPUT CURRENT.cvervovsssnenancrcannnns 85 max. Milliamperes
A-C PLATE VOLTAGE PER PrLATE (RMS)	250 V	A-C PLATE VOLTAGE PER PrLATE (RMS)... 125 max. 250* max. Volts
Peax PLATE CURRENT PER PLATE	500	Peax PLATE CURRENT PER PLATE..... 500 max. 500 max. Milliamperes
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SOURCE OPERATING CONDITIONS

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1950 Sylvania

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

1950 SYLVANIA

Section 1 · Rectifier

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Service	Full-wave rectifier / voltage doubler	—

1950 SYLVANIA

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Service	Full-wave rectifier / voltage doubler	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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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 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	25 V	Published heater/filament rating
Heater/filament current	300 mA	Published heater/filament rating
Tube voltage drop	22 V	At 150 mA DC

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC output current	75 mA	RectifierDoubler
Peak inverse voltage	700 V	RectifierDoubler
RMS supply voltage	235 V	RectifierDoubler
Peak current	450 mA	RectifierDoubler

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 2 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	25 V	Published heater/filament rating
Heater/filament current	300 mA	Published heater/filament rating
Tube voltage drop	22 V	At 150 mA DC

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC output current	75 mA	RectifierDoubler
Peak inverse voltage	700 V	RectifierDoubler
RMS supply voltage	235 V	RectifierDoubler
Peak current	450 mA	RectifierDoubler

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