



ELECTRONIC TUBE REFERENCE

50X6

Rectifier - Full Wave electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

RECTIFIER-RECTIFIER

Dual high-vacuum diode for half-wave, full-wave, and voltage-doubler power supplies. Its 50 V low-current heater makes it particularly useful in transformerless receiver equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7AJ	BASE PINS	8
NOMINAL HEATER	50 V / 150 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	700 V
NOMINAL OUTPUT CURRENT	75 mA
PEAK FORWARD CURRENT	450 mA
FORWARD VOLTAGE DROP	22 V
MAXIMUM HEATER-CATHODE VOLTAGE	350 V
Representative row for two electrically identical independent diode sections.	

SECTION2 Rectifier	
PEAK INVERSE VOLTAGE	700 V
NOMINAL OUTPUT CURRENT	75 mA
PEAK FORWARD CURRENT	450 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>	

Two independent high-vacuum diodes for half-wave, full-wave, or voltage-doubler power-rectifier service.

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 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	50 V	Published heater/filament rating
Heater/filament current	150 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	RectifierService
Peak inverse voltage	700 V	RectifierService
RMS supply voltage per plate	235 V	RectifierService
Peak current per plate	450 mA	RectifierService

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 2 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	50 V	Published heater/filament rating
Heater/filament current	150 mA	Published heater/filament rating

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC output current	75 mA	RectifierService
Peak inverse voltage	700 V	RectifierService

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 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	50 V	—
Heater current	150 mA	—
AC plate voltage each plate RMS	117 V	VoltageDoubler
Filter input condenser	16 uF	VoltageDoubler
Minimum total effective plate-supply impedance	30 ohm	VoltageDoubler
DC output current	75 mA	VoltageDoubler

1961 TUNG SOL

Section 2 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	50 V	—
Heater current	150 mA	—
AC plate voltage each plate RMS	117 V	VoltageDoubler
Filter input condenser	16 uF	VoltageDoubler
Minimum total effective plate-supply impedance	30 ohm	VoltageDoubler
DC output current	75 mA	VoltageDoubler

TUBE TINKER

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

