

ELECTRONIC TUBE REFERENCE

6BY5GA

Rectifier - Full Wave electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

RECTIFIER-RECTIFIER

Full-wave high-vacuum rectifier for AC power supplies. Rated for approximately 1.4 kV peak inverse voltage, 175 mA DC output, and 525 mA peak current from a 6.3 V heater.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6CN	BASE PINS	6
NOMINAL HEATER	6.3 V / 1.6 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

6CN - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 2K	B	K – Cathode	CONNECTED
PIN2 – H	–	H – Heater	CONNECTED
PIN3 – IC	–	–	IC
PIN4 – 2P	B	P – Plate (Anode)	CONNECTED
PIN5 – 1P	A	P – Plate (Anode)	CONNECTED
PIN7 – H	–	H – Heater	CONNECTED
PIN8 – 1K	A	K – Cathode	CONNECTED

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	1400 V
NOMINAL OUTPUT CURRENT	175 mA
PEAK FORWARD CURRENT	525 mA
FORWARD VOLTAGE DROP	32 V
<i>Published maximum ratings, operating characteristics, rectifier data, and capacitances reviewed.</i>	

SECTION2 Rectifier	
PEAK INVERSE VOLTAGE	1400 V
NOMINAL OUTPUT CURRENT	175 mA
PEAK FORWARD CURRENT	525 mA
FORWARD VOLTAGE DROP	32 V

6BY5GA is listed in the supplied receiving-tube handbook as a full-wave high-vacuum rectifier. The published heater rating is 6.3 V at 1.6 A; maximum ratings and representative operating characteristics were transcribed from the supplied table.

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 voltage	6.3 V	Published heater rating
Heater current	1.6 A	Published heater rating
Tube voltage drop	32 V	At 175 mA DC

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC output current	175 mA	FullWave
Peak inverse voltage	1400 V	FullWave
RMS supply voltage per plate	375 V	FullWave
Peak current per plate	525 mA	FullWave
TV damper peak inverse voltage	3000 V	TVDamperService

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 2 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published heater rating
Heater current	1.6 A	Published heater rating

TUBE TINKER

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

