

ELECTRONIC TUBE REFERENCE

BH

Rectifier - Full Wave electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
RECTIFIER-RECTIFIER

Cold-cathode twin-diode gas-filled full-wave rectifier requiring no heater supply. Rated for approximately 1 kV peak inverse voltage and 125 mA nominal output for heaterless electronic power supplies.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8EC	BASE PINS	—
NOMINAL HEATER	— / —	PARALLEL HEATER	— / —
HEATING	Indirect; cold cathode	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

8EC - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 — G3	A	G3 — Suppressor Grid	CONNECTED
PIN1 — IS	A	IS — Internal Screen	CONNECTED
PIN1 — K	A	K — Cathode	CONNECTED
PIN2 — H	—	H — Heater	CONNECTED
PIN3 — G2	A	G2 — Screen Grid	CONNECTED
PIN4 — G3	A	G3 — Suppressor Grid	CONNECTED
PIN4 — IS	A	IS — Internal Screen	CONNECTED
PIN4 — K	A	K — Cathode	CONNECTED
PIN5 — G1	A	G1 — Control Grid	CONNECTED
PIN6 — G3	A	G3 — Suppressor Grid	CONNECTED
PIN6 — IS	A	IS — Internal Screen	CONNECTED
PIN6 — K	A	K — Cathode	CONNECTED
PIN7 — H	—	H — Heater	CONNECTED

TERMINAL	SECTION	ELEMENT	STATUS
PIN8 – SH	A	SH – Internal Shield	CONNECTED
CAP1 – P	A	P – Plate (Anode)	CONNECTED

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	1000 V
NOMINAL OUTPUT CURRENT	125 mA
PEAK FORWARD CURRENT	400 mA
FORWARD VOLTAGE DROP	90 V
<i>Promoted only from clearly identified printed ratings/characteristics; additional operating and limiting values retained in TUBE_SECTION_PARAMETER.</i>	

SECTION2 Rectifier	
PEAK INVERSE VOLTAGE	1000 V
NOMINAL OUTPUT CURRENT	125 mA
PEAK FORWARD CURRENT	400 mA
FORWARD VOLTAGE DROP	90 V
<i>Second physical rectifier section added for documented twin-diode full-wave construction.</i>	

BH is a Raytheon cold-cathode twin-diode gas-filled full-wave rectifier requiring no heater supply.



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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum AC voltage per plate RMS	350 V	FullWave GasFilled
Maximum DC output current	125 mA	FullWave GasFilled
Maximum peak plate current	400 mA	FullWave GasFilled
Maximum inverse peak voltage	1000 V	FullWave GasFilled

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Minimum starting peak voltage	350 V	FullWave GasFilled
Average dynamic voltage drop	90 V	FullWave GasFilled



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Raytheon Special Purpose Tubes

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

195X RAYTHEON SPECIAL PURPOSE TUBES

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse voltage maximum	1000 V	FullWave;Gas
Peak plate current per plate maximum	400 mA	FullWave;Gas

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC output current maximum	125 mA	FullWave;Gas

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Average tube voltage drop	90 V	FullWave;Gas

195X RAYTHEON SPECIAL PURPOSE TUBES

Section 2 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse voltage maximum	1000 V	FullWave;Gas
Peak plate current per plate maximum	400 mA	FullWave;Gas