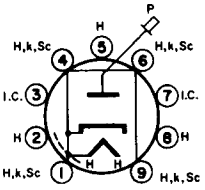
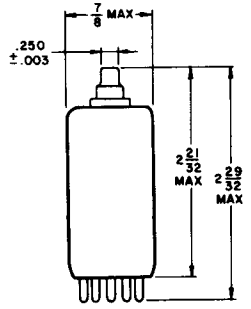
AMPEREX TUBE TYPE IBQ2

This tube is a high-vacuum single-anode rectifier for high tension in television receivers (EHT supply from the line time base). It has a chemically treated envelope which avoids flash-over under conditions of high humidity and low atmospheric pressure.



PIN CONNECTIONS[1,2,3]

1 – HEATER, CATHODE, SCREEN
2 – HEATER
3 – INTERNAL CONNECTION
4 – HEATER, CATHODE, SCREEN
5 – HEATER
6 – HEATER, CATHODE, SCREEN
7 – INTERNAL CONNECTION
8 – HEATER
9 – HEATER, CATHODE, SCREEN
P – PLATE (TOP CAP)



GENERAL CHARACTERISTICS

Mechanical

Dimensions	see outline drawing
Bulb	T 6-1/2, glass
Base	E9-1, noval
Cap	C1-2
Mounting Position	any

Electrical

Heater Characteristics	
Heater Arrangement	parallel supply
Heater Voltage (AC or DC)[4]	1.4 volts ±10%
Heater Current	0.6 amps
Direct Interelectrode Capacitance	
Plate to All	1.0 pf

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[1] Pins 1, 4, 6 and 9 can be used for fixing an anti-corona ring.

[2] Circuit elements having the same potential as the heater (e.g. a series resistor) may be connected to pins 3 and 7. These pins must never be grounded.

[3] If the tube operates at high inverse plate voltages and/or under conditions of high relative humidity or low pressure the metal cap should get an insulating cover to avoid corona phenomena.

[4] For use as EHT rectifier in television receivers the heater voltage should be adjusted to its nominal value at a D.C. output current of 200 μa. At an increase of the D.C. output current to 400 - 800 μa which may occur during operation, the decrease of the heater voltage may amount to 15% maximum.

These requirements hold for nominal voltage and full horizontal scanning of the picture tube. If the picture width control is such that also the heater voltage of the E.H.T. diode is influenced, the influence of this control must be kept within the 15% limit indicated above.

Operating Characteristics

Output Current	I_o	200 μA
Output Voltage	V_o	20 KV

Maximum Ratings, Design Center Values

Plate Inverse Voltage[5]	20,000 volts
Peak Plate Inverse Voltage[6]	25,000 volts
Average Output Current[7]	500 μa
Peak Output Current	50 ma
Filter Input Capacitance	3,000 pf

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[5] D.C. component

[6] Max. pulse duration 22% of a cycle, but max. 18 microseconds. The absolute maximum value = 30,000 volts.

[7] During short periods as in TV operation I_b = max. 800 microamps.