

# AMPEREX TUBE TYPE **OB2**

The OB2 is a two electrode, inert gas filled, cold cathode tube for use in voltage regulator applications.

## ELECTRICAL DATA

	<u>Min.</u>	<u>Nom.</u>	<u>Max.</u>	
Operating voltage (Plt. current = 17.5 ma)	106	108	111 volts	←
Anode breakdown voltage with illumination of 50-500 ft. candles,			127 volts max.	
Anode breakdown voltage in complete darkness			210 volts max.	
Regulation (Plt. current = 5-30 ma)			3.5 volts max.	←
Voltage variation during 500 hrs. operation			4 volts	←

## MECHANICAL DATA

Mounting Position	any
Base (JETEC base designation)	5B0, 7 pin miniature
Max. overall length	2 5/8 inches
Max. diameter	3/4 inch

## MAXIMUM RATINGS (absolute values)

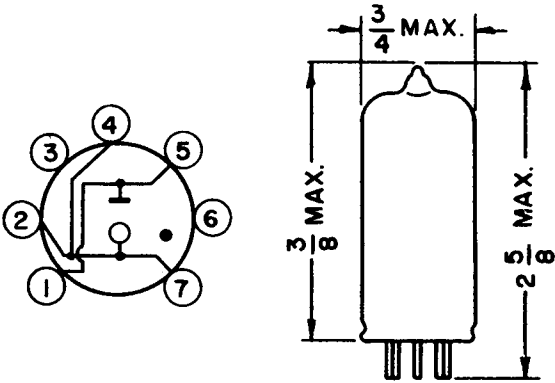
Minimum D.C. anode supply voltage <sup>1</sup>	133 volts
Maximum average anode starting current	75 ma
Maximum averaging time	10 seconds
Maximum D.C. cathode current	30 ma
Minimum D.C. cathode current	5 ma
Maximum frequency <sup>2</sup>	0 cycles/sec.
Max. shunt capacitor <sup>3</sup>	0.1 uf
Ambient temperature limits	-55 <sup>0</sup> to +90 <sup>0</sup> C

<sup>1</sup> Supply voltage necessary to insure starting throughout tube life with an illumination of 50-500 foot candles.

<sup>2</sup> Tube used so that cathode cannot become positive and anode negative.

<sup>3</sup> In order to prevent parasitic oscillation, the value of a capacitor in parallel with the tube should be limited to 0.1 uf.

# OB2



- PIN NO. 1 = ANODE
- PIN NO. 2 = CATHODE
- PIN NO. 3 = INTERNALLY CONNECTED
- PIN NO. 4 = CATHODE
- PIN NO. 5 = ANODE
- PIN NO. 6 = INTERNALLY CONNECTED
- PIN NO. 7 = CATHODE

## VOLTAGE-CURRENT CHARACTERISTIC

