

IGNITRON

DESCRIPTION

The GL-427 is a small glass, air-cooled ignitron tube which combines the advantages of simple construction and visibility of operation. It is designed primarily for demonstrating the unique and interesting characteristics of ignitors used to

initiate a cathode spot. The sturdy construction makes it particularly applicable to classroom demonstrations or student experiments. A red glass filter will be found to be a convenient aid in observing ignitor operation.

TECHNICAL INFORMATION

These data are for reference only. For design information refer to specifications.

GENERAL CHARACTERISTICS

Number of electrodes 3

Electrical

Typical arc drop 10-15 volts

Type of cooling

Free-air circulation

Average anode current 5 amperes

Ambient temperature 25 centigrade

Condensed mercury temperature 100 centigrade

Forced-air circulation†

Average anode current 10 amperes

Ambient temperature 25 centigrade

Condensed mercury temperature 100 centigrade

†An ordinary desk fan will provide sufficient cooling for most uses.



TECHNICAL INFORMATION (CONT'D)

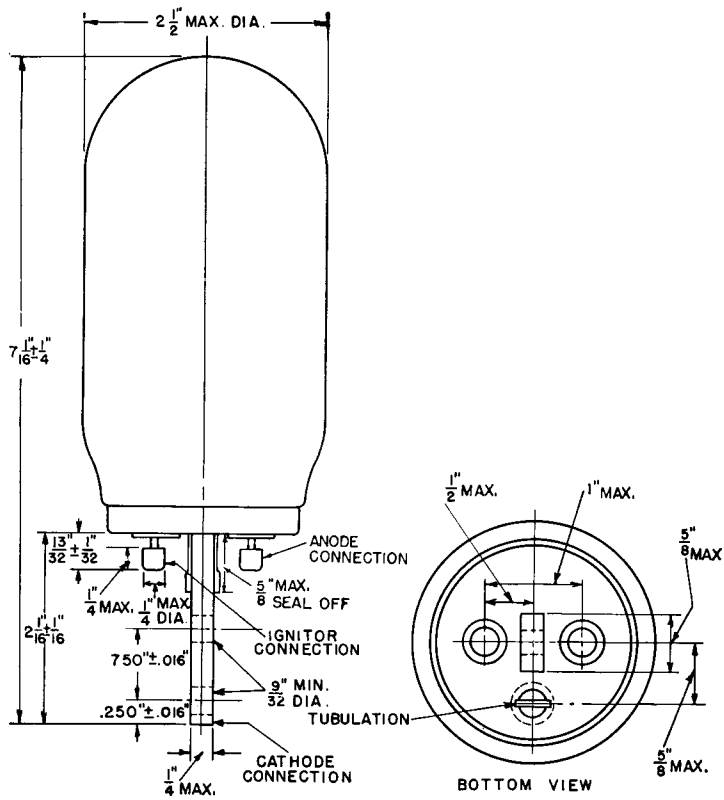
Mechanical

Net weight, approx.....	1.5 pounds
Shipping weight, approx.....	3 pounds

MAXIMUM RATINGS

Anode voltage, maximum inverse and forward.....	350 volts
Anode current	
Maximum instantaneous.....	30 amperes
Maximum average, free-air circulation.....	5 amperes
Maximum average, forced-air circulation.....	10 amperes
Maximum temperature, condensed mercury.....	100 centigrade
Ignitron voltage	
Maximum instantaneous allowed, ignitor positive.....	350 volts
Maximum instantaneous required, ignitor positive*.....	150 volts
Maximum instantaneous allowed, ignitor negative.....	5 volts
Ignitor current	
Maximum instantaneous allowed.....	100 amperes
Maximum instantaneous required*.....	30 amperes
Maximum average allowed.....	2 amperes
Maximum averaging time.....	10 seconds
Maximum ignition time*.....	100 microseconds

*Application of either the maximum required ignitor voltage or current will provide a cathode spot in maximum ignition time.



**OUTLINE
 GL-427 IGNITRON**

K-6966951

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