

# Central ELECTRONIC

## MANUFACTURERS

DENVILLE, NEW JERSEY

HIGH  
VACUUM  
DIODE

XD - 31

### DESCRIPTION

The Central tube type XD-31 is a forced air cooled high voltage, high current diode featuring a unipotential oxide coated cathode and an external anode. The XD-31 is designed for rectifier or clipper service.

### SPECIFICATIONS:

#### PHYSICAL

|                            |            |
|----------------------------|------------|
| Length                     | 3½ inches  |
| Diameter                   | 2 inches   |
| Weight                     | 6 ounces   |
| Mounting Position          | Any        |
| Type of Cooling            | Forced Air |
| Required Air Flow on Anode |            |

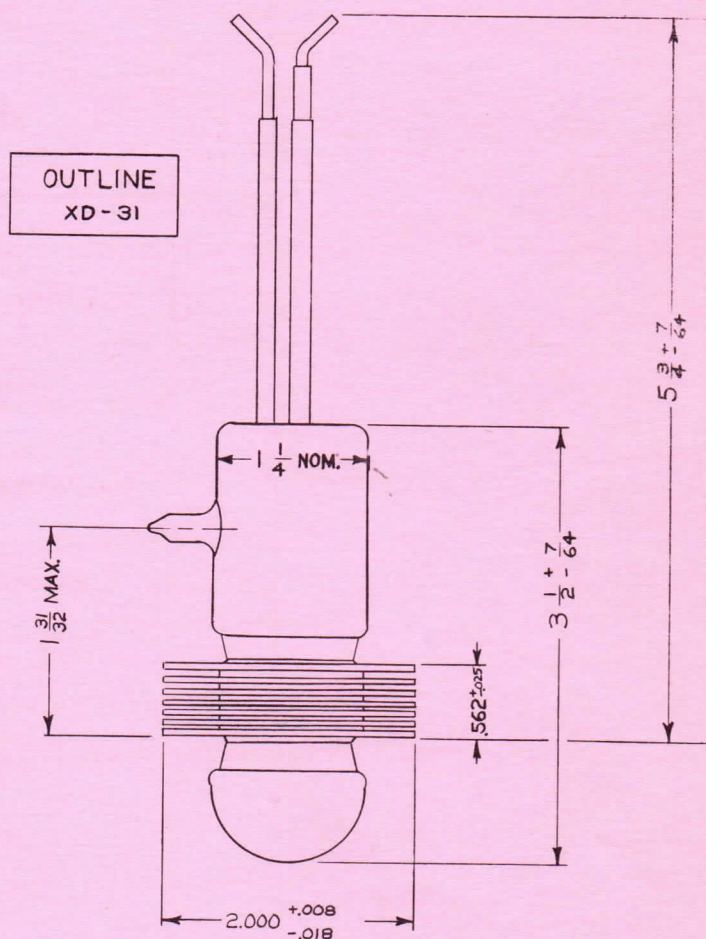
| Velocity<br>(cfm)                | Anode Dissipation<br>(Kw) | Pressure<br>(in. of water) |
|----------------------------------|---------------------------|----------------------------|
| 50                               | .15                       | 1.0                        |
| Maximum Incoming Air Temperature | 45°C                      |                            |
| Maximum Glass Seal Temperature   | 180°C                     |                            |

#### ELECTRICAL (RECTIFIER)

|                       |                                   |
|-----------------------|-----------------------------------|
| Filament              | Oxide coated unipotential cathode |
| Heater Voltage        | 6 Volts                           |
| Heater Current        | 6.5 Amperes                       |
| Peak Inverse Voltage  | 17 Kilovolts                      |
| Peak Anode Current    | 2.7 Amperes                       |
| Average Anode Current | 0.7 Amperes                       |
| Anode Dissipation     | 150 Watts                         |

#### ELECTRICAL (CLIPPER)

|                      |              |
|----------------------|--------------|
| Heater Voltage       | 6 Volts      |
| Heater Current       | 6.5 Amperes  |
| Peak Inverse Voltage | 15 Kilovolts |
| Peak Anode Current   | 20 Amperes   |
| RMS Anode Current    | 1.5 Amperes  |
| Pulse Width (max.)   | 1 µ second   |
| Duty Cycle (max.)    | 0.0012       |
| Anode Dissipation    | 150 Watts    |



#### PROVISIONAL DATA

Issued 8-60

Check factory before  
finalizing designs.

Over

