

**OBJECTIVE  
 TECHNICAL INFORMATION**

These ratings represent the design objective for this product. Refer to the Preliminary Technical Information sheet for ratings currently achieved in the progression towards design objectives. If PTI sheets do not exist, consult your local Tube Department Regional Sales Office.

DEVELOPMENTAL  
 TYPE  
 ZP-1026  
 OTI-80  
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*This technical information is proprietary and is furnished only as a service to customers.*

**ZP-1026  
 TRIODE**

Grid-Pulsed Amplifier Service  
 Grounded-Grid Operation

Heat-Sink and Forced-Air Cooled  
 Metal and Ceramic

The ZP-1026 is a heat-sink-cooled triode especially designed for grid-pulsed amplifier service in L-band. This tube is particularly well suited for use in navigational aid beacons (TACAN). Features include small size, high gain, long pulse width and high duty capability, long life and reliability.

**ELECTRICAL**

Heater Voltage*	6.3	Volts
Heater Current	3.8	Amperes
Cathode Heating Time, minimum	1	Minute
Direct Interelectrode Capacitances		
Input	15.5	$\mu\text{mf}$
Output	5.9	$\mu\text{mf}$
Plate-Cathode	0.13	$\mu\text{mf}$

**MECHANICAL**

Mounting Position - Any		
Net Weight, approximately	3 1/4	Ounces

**THERMAL**

Cooling - Heat-sink and Forced-air		
Anode Temperature §	250	C
Ceramic Temperature at Any Point	200	C

**GRID-PULSED AMPLIFIER - CLASS AB<sub>2</sub>**

**Maximum Ratings**

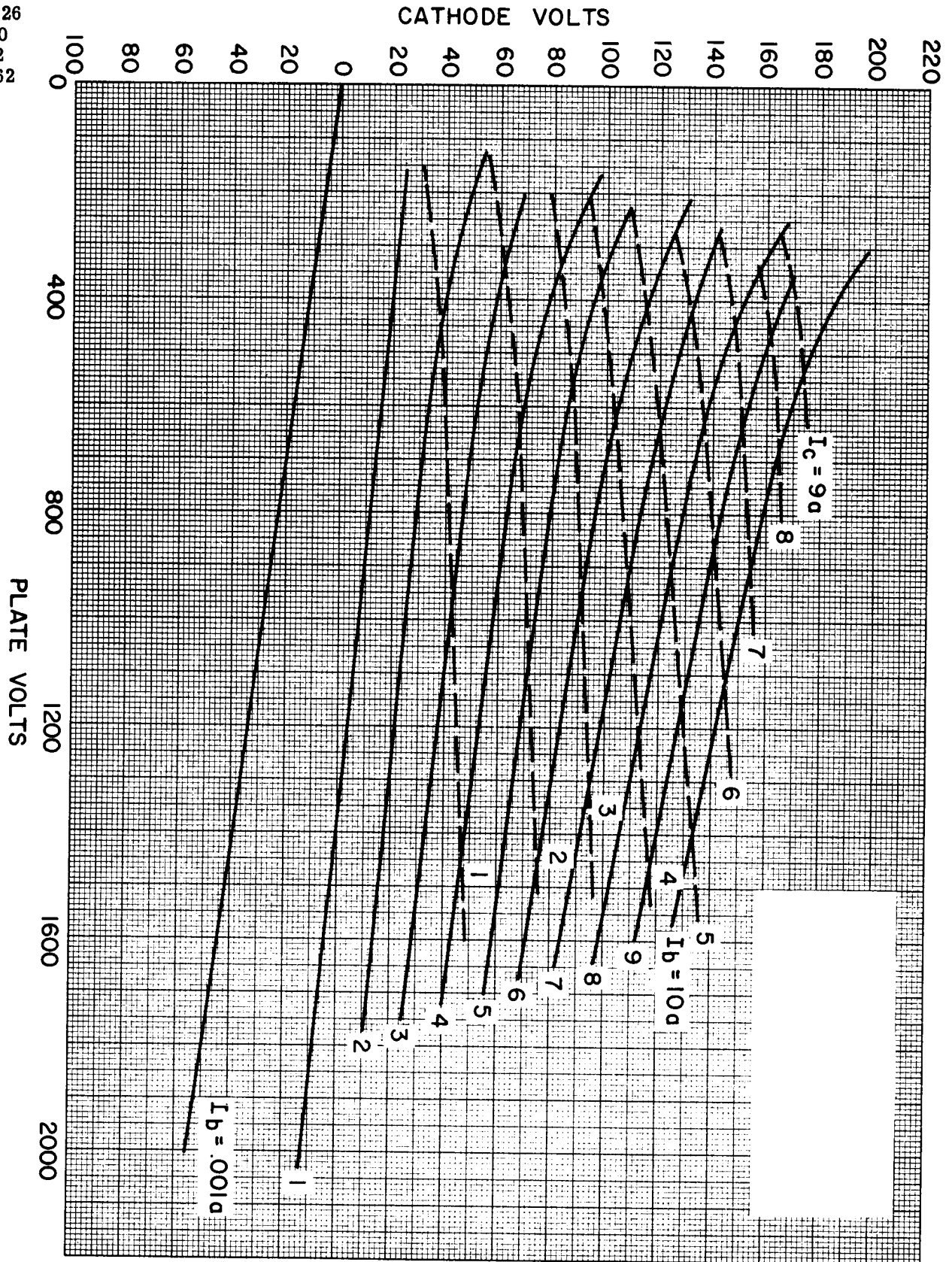
DC Plate Voltage	2.5	Kilovolts
DC Plate Current, during pulse	2.0	Amperes
DC Grid Voltage	-200	Volts
Plate Dissipation	110	Watts
Pulse Width	10	Microseconds
Duty Factor $\phi$	.04	

**Typical Operation**

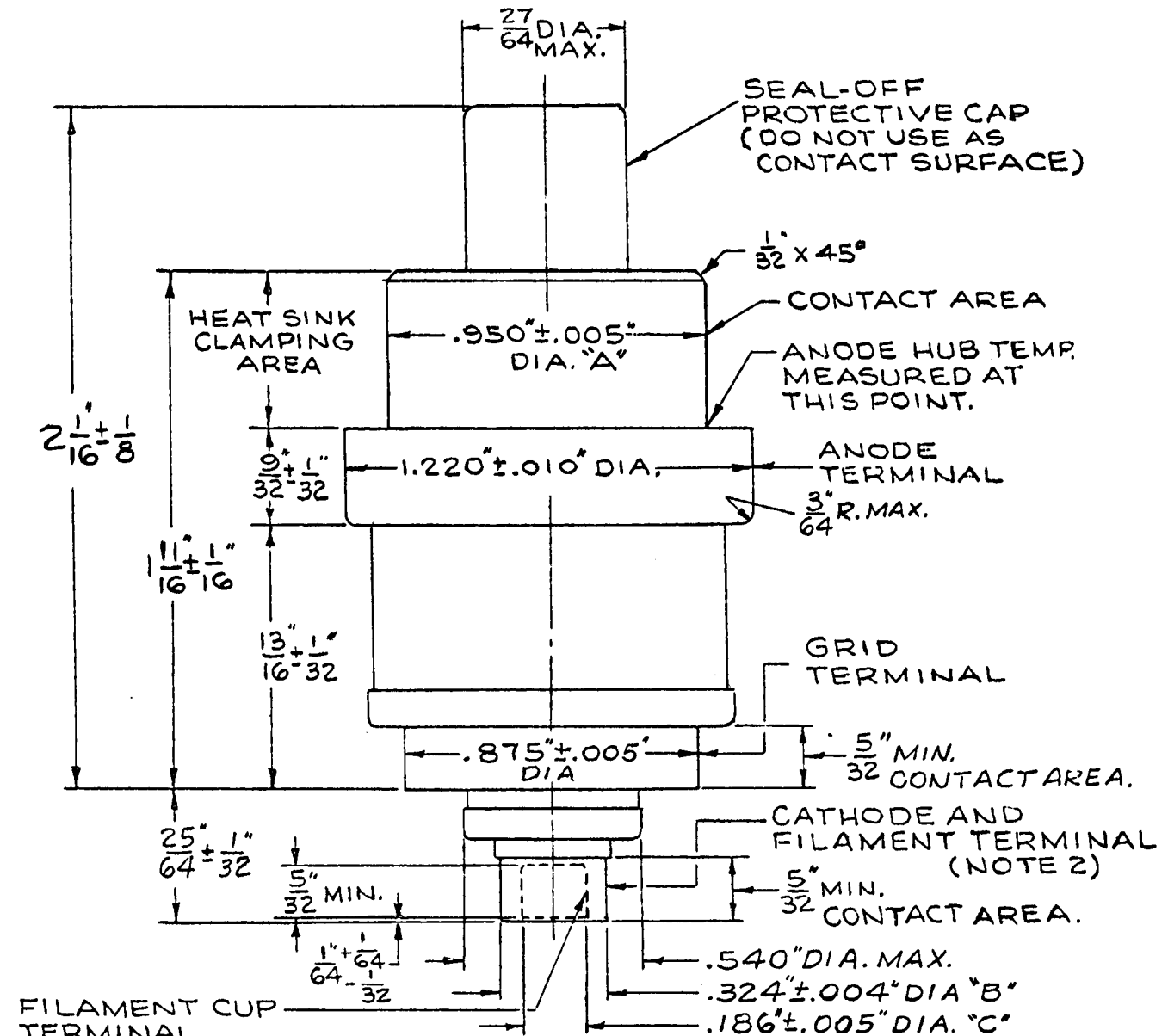
**Grounded-Grid Circuit at 1215 mcs, 3/4  $\lambda$  Output**

DC Plate Voltage	2000	Volts
DC Plate Current, during pulse	1.6	Amperes
DC Grid Voltage	-75	Volts
DC Grid Voltage, during pulse	0	Volts
DC Grid Current, during pulse	.5	Amperes
Power Output, during pulse (useful)	750	Watts
Drive Power, during pulse	95	Watts
Pulse Width $\diamond$	8	Microseconds
Duty Factor	.03	

- \* Because of back-heating due to transit time effects, it may be necessary to reduce the heater voltage.
- § A suitable heat-sink clamping arrangement must be provided to limit the anode hub temperature to the value specified.
- $\phi$  Maximum ratio of on-time to elapsed time during any 250 microsecond period.
- $\diamond$  Pulse duration is measured between points at 70 percent of the peak value. The peak value is defined as the maximum value of a smooth curve through the average of the fluctuations over the top portion of the pulse.



Voltages Referenced to Grid



CONCENTRICITIES:

The following total indicator readings are measured with respect to a centerline determined by the centers of the anode terminal and control grid terminal.

- Diameter A - 0.030 inches
- Diameter B - 0.036 inches
- Diameter C - 0.042 inches

Total indicator reading of filament cup terminal diameter (C) measured with respect to center of cathode and filament terminal diameter (B) - 0.016 inches.

TUBE DEPARTMENT  
**GENERAL**  **ELECTRIC**  
Owensboro, Kentucky