GENERAL ELECTRIC
POWER TUBE DEPARTMENT
Schenectady 5, N. Y.

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 Power Tube Department Regional Sales Office.

DEVELOPMENTAL
TYPE
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ZP-1061
TRIODE

Internal Feedback for Oscillator Service
Grid-Pulsed or Plate-Pulsed Operation

Heat-Sink and Forced-Air Cooled
Metal and Ceramic

The ZP-1061 is a heat-sink-cooled triode especially designed for grid-pulsed oscillator service in L-band. The tube is particularly well suited for use in navigational aid applications.

The ZP-1061 features all necessary feedback within the tube envelope, which eliminates the need for the complicated external-circuit arrangements normally required in oscillator service.

Other features include small size, long pulse width, high duty capability, and long life and reliability.

ELECTRICAL

Heater Voltage*	5.0	Volts
Heater Current	2.4	Amperes
Cathode Heating Time, minimum	1	Minute
Direct Interelectrode Capacitances		
Input	16.0	uuf
Output	4.3	uuf

MECHANICAL

Mounting Position - Any		
Net Weight, approximate	2-1/2	Ounces

THERMAL

Cooling - Heat-sink or Forced Air		
Maximum Anode Temperature#	250	C
Maximum Ceramic Temperature at Any Point	200	C

GRID-PULSED OSCILLATOR - CLASS C **

Maximum Ratings		
DC Plate Voltage	2.5	Kilovolts
DC Plate Current, during pulse	2.0	Amperes
DC Grid Voltage	-200	Volts
Plate Dissipation	50	Watts
Pulse Width&	10	Microseconds
Duty Factorϕ&	0.01	
Typical Operation		
Grounded-Grid Circuit at 1090 mcs, 1/4 λ Output		
DC Plate Voltage	1750	Volts
DC Plate Current, during pulse	1.25	Amperes
DC Grid Voltage	-80	Volts
DC Grid Current, during pulse	0.75	Amperes
Power Output, during pulse (useful)	1000	Watts
Pulse Widthϕ	0.5	Microseconds
Duty Factor	0.01	

The specifications of this type are subject to change. This device is now under development and is made available for experimental purposes only. For the most recent information concerning the status of this development, please consult your local Power Tube Department Regional Sales Office, or current Preliminary Technical Information for the same catalog number.

* 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.

ϕ Maximum ratio of on-time to elapsed time during any 250 microsecond period.

ϕ Pulse duration is measured between points at 70 percent of the peak value. The peak value is defined at the maximum value of a smooth curve through the average of the fluctuations over the top portion of the pulse.

& For recommendations on longer pulse width and higher duty factor refer to the manufacturer.

** Plate-pulsed oscillator operation may be used for considerably higher peak power output than that indicated under typical operation. For recommendations refer to the manufacturer.