

ELECTRONIC TUBE REFERENCE

ZP1025

Power - Triode (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA  
1 SECTION  
CONSTRUCTION  
TRIODE

Forced-air-cooled metal-ceramic triode designed for pulsed L-band grounded-grid oscillator service.

GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | —             |
| NOMINAL HEATER      | 6.3 V / 3.5 A     | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

SECTION RATINGS

|                                                                                                                                                                                            |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| SECTION1 Triode                                                                                                                                                                            |        |
| MAXIMUM PLATE VOLTAGE                                                                                                                                                                      | 6000 V |
| MAXIMUM PLATE DISSIPATION                                                                                                                                                                  | 110 W  |
| MAXIMUM CATHODE CURRENT                                                                                                                                                                    | 10 A   |
| Promoted fields mapped semantically from printed ratings/characteristics headings; pulsed and microwave-specific limits remain in parameter rows when fixed-field semantics are ambiguous. |        |

Metal-ceramic heat-sink and forced-air-cooled triode for pulsed L-band grounded-grid oscillator service.



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1950 General Electric Transmitting Types

Published test conditions and operating points. Values on this page are preserved as reported by this source.

## 1950 GENERAL ELECTRIC TRANSMITTING TYPES

## Section 1 · Triode

| CHARACTERISTIC            |                 |                  |
|---------------------------|-----------------|------------------|
| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE |
| HeaterOrFilamentVoltage   | 6.3 V           | —                |
| HeaterOrFilamentCurrent   | 3.8 A           | —                |
| CathodeToPlateCapacitance | 0.45 pF         | —                |

| OTHER                        |                 |                         |
|------------------------------|-----------------|-------------------------|
| PARAMETER                    | PUBLISHED VALUE | CONDITION / NOTE        |
| UsefulPowerOutputDuringPulse | 40 kW           | PulsedOscillator        |
| UsefulPowerOutputDuringPulse | 2 kW            | 1100MHz;DutyFactor=0.02 |



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1968 General Electric Co

Published test conditions and operating points. Values on this page are preserved as reported by this source.

## 1968 GENERAL ELECTRIC CO

## Section 1 · Triode

| OTHER                                      |                 |                                                                                                                 |
|--------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------|
| PARAMETER                                  | PUBLISHED VALUE | CONDITION / NOTE                                                                                                |
| Heater Current . . . . .<br>... e, 3.5 3.8 | 4 A             | Heater Current . . . . . e, 3.5 3.8 4.0 Amperes                                                                 |
| DC Plate Voltage, During Pulse             | 6 kV            | DC Plate Voltage, During Pulse..... 6.0 Kilovolts Grounded-Grid Service at 1300 Megacycles, 3% A Output Circuit |

| PARAMETER                                                         | PUBLISHED VALUE | CONDITION / NOTE                                                                                     |
|-------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------------------|
| DC Plate Current, During Pulse                                    | <b>10 A</b>     | DC Plate Current, During Pulse.. 10.0 Amperes<br>DC Plate Voltage, During Pulse....._ 6.0 Kilovolts  |
| DC Grid Voltage, During Pulse..... .. —                           | <b>400 V</b>    | DC Grid Voltage, During Pulse..... .. —400 Volts<br>DC Plate Current, During Pulse..... 7.0 Amperes  |
| DC Grid Current, During Pulse                                     | <b>5 A</b>      | DC Grid Current, During Pulse..... 5.0 Amperes<br>DC Grid Current, During Pulse....._.._ 4.3 Amperes |
| Plate Dissipation§                                                | <b>110 W</b>    | Plate Dissipation§ 110 Watts (Grid Resistor = 50 Ohms)                                               |
| Pulse Width ¢                                                     | <b>10 us</b>    | Pulse Width ¢ 10 Microseconds Power Output, During Pulse (Useful) 24.0 Kilowatts                     |
| Duty Factor¢ .. 0.001 Pulse Width                                 | <b>10 us</b>    | Duty Factor¢ .. 0.001 Pulse Width 10 Microseconds                                                    |
| DC Plate Voltage                                                  | <b>2.6 kV</b>   | DC Plate Voltage 2.6 Kilovolts Grounded-Grid Circuit at 1100 Megacycles, 14 A Output                 |
| DC Plate Current, During Pulse                                    | <b>3 A</b>      | DC Plate Current, During Pulse 3.0 Amperes<br>DC Plate Voltage 1750 1950 2200 Volts                  |
| DC Grid Voltage —                                                 | <b>200 V</b>    | DC Grid Voltage —200 Volts<br>DC Plate Current, During Pulse....._.. 2.6 2.7 Amperes                 |
| Plate Dissipation                                                 | <b>110 W</b>    | Plate Dissipation 110 Watts<br>DC Grid Voltage Supply**..._... - —97 —104 —104 Volts                 |
| Pulse Width¢                                                      | <b>15 us</b>    | Pulse Width¢ 15 Microseconds<br>DC Grid Current, During Pulse..... 1.05 1.2 1.26 Amperes             |
| Duty Factor¢ 0.02 Power Output, During Pulse (Useful) 1.5 2.0     | <b>2.4 kW</b>   | Duty Factor¢ 0.02 Power Output, During Pulse (Useful) 1.5 2.0 2.4 Kilowatts                          |
| Pulse Width 10 10                                                 | <b>10 us</b>    | Pulse Width 10 10 10 Microseconds                                                                    |
| 1100 mcs, 2 kw, .02 duty condition, the typical heater voltage is | <b>5.5 V</b>    | 1100 mcs, 2 kw, .02 duty condition, the typical heater voltage is 5.5 volts.                         |
| ** With a series grid resistance of                               | <b>50 Ohm</b>   | ** With a series grid resistance of 50 ohms.                                                         |

| CAPACITANCE                                                                       |                 |                                                                              |
|-----------------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------|
| PARAMETER                                                                         | PUBLISHED VALUE | CONDITION / NOTE                                                             |
| Anode Temperature § . . . .<br>. . . . i i i t i i t t e e e e<br>e e e e e e e e | <b>250 C</b>    | Anode Temperature § . . . . . i i i t i i t t e e e e<br>e e e e e e e 250 C |
|                                                                                   |                 |                                                                              |

| PARAMETER                                 | PUBLISHED VALUE | CONDITION / NOTE                                         |
|-------------------------------------------|-----------------|----------------------------------------------------------|
| Ceramic Temperature at Any Point, maximum | <b>200 C</b>    | Ceramic Temperature at Any Point, maximum<br>..... 200 C |

| CHARACTERISTIC             |                 |                                            |
|----------------------------|-----------------|--------------------------------------------|
| PARAMETER                  | PUBLISHED VALUE | CONDITION / NOTE                           |
| Diameter A                 | <b>0.03 in</b>  | Diameter A - 0,030 inches                  |
| Diameter B                 | <b>0.036 in</b> | Diameter B - 0,036 inches                  |
| Diameter C                 | <b>0.042 in</b> | Diameter C - 0,042 inches                  |
| ment terminal diameter (B) | <b>0.016 in</b> | ment terminal diameter (B) - 0.016 inches, |