



## ELECTRONIC TUBE REFERENCE

6183

Power - Tetrode (NOT beam) (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL  
DATA1 SECTION  
CONSTRUCTION  
TETRODE

Metal-ceramic transmitting tetrode for grounded-grid RF power amplifier or oscillator circuits. Forced-air cooled and useful to about 900 MHz, it serves broadband television, Class-C RF, and dielectric-heating applications.

## GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | —             |
| NOMINAL HEATER      | 6.3 V / 24 A      | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

## SECTION RATINGS

|                           |        |
|---------------------------|--------|
| SECTION 1 Tetrode         |        |
| AMPLIFICATION FACTOR      | 10     |
| MAXIMUM PLATE VOLTAGE     | 4000 V |
| MAXIMUM SCREEN VOLTAGE    | 600 V  |
| MAXIMUM PLATE DISSIPATION | 1500 W |
| MAXIMUM GRID DISSIPATION  | 16 W   |
| MAXIMUM CATHODE CURRENT   | 4 A    |

The GL-6183 is a four-electrode metal-and-ceramic transmitting tube for grounded-grid power-amplifier or oscillator circuits. It is forced-air cooled, rated through 900 MHz, and intended for broadband television, Class C RF power, oscillator, and dielectric-heating service.

## 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 · Tetrode

| OTHER                              |                 |                                                                                    |
|------------------------------------|-----------------|------------------------------------------------------------------------------------|
| PARAMETER                          | PUBLISHED VALUE | CONDITION / NOTE                                                                   |
| Typical Plate Voltage              | 3500 V          | ClassB; Television; GroundedGrid; up to 900MHz                                     |
| TypicalPowerOutputSynchronizing    | 1000 W          | ClassB; Television; GroundedGrid; up to 900MHz                                     |
| use                                | 1 C             | amplifier or oscillator. Because of 1its ratings, the tube is also well adapted to |
| Ep                                 | 500 V           | amplifier or oscillator. Because of 1its ratings, the tube is also well adapted to |
| Plate Dissipation                  | 1.5 kW          | amplifier or oscillator. Because of 1its ratings, the tube is also well adapted to |
| Air Flow                           | 60 C            | amplifier or oscillator. Because of 1its ratings, the tube is also well adapted to |
| Plate Input                        | 2.5 kW          | —                                                                                  |
| Plate Dissipation                  | 1.5 kW          | —                                                                                  |
| Band Width                         | 6 MHz           | —                                                                                  |
| Pedestal Level                     | 70 V            | —                                                                                  |
| Pedestal Level                     | 360 mA          | —                                                                                  |
| D- Grid-No                         | 1 C             | —                                                                                  |
| Pedestal Level                     | 35 mA           | —                                                                                  |
| Pedestal Level                     | 25 W            | —                                                                                  |
| Pedestal Level(                    | 560 W           | —                                                                                  |
| Peak R-f Plate Voltage approximate | 2750 V          | Radio-frequency Power Amplifier and Oscillator -- Class C Telegraphy               |
| D- Grid-No                         | 1 C             | Radio-frequency Power Amplifier and Oscillator -- Class C Telegraphy               |
|                                    |                 |                                                                                    |

| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE                                                     |
|---------------------------|-----------------|----------------------------------------------------------------------|
| Driving Power approximate | <b>150 W</b>    | Radio-frequency Power Amplifier and Oscillator -- Class C Telegraphy |
| Power Output approximated | <b>1200 W</b>   | Radio-frequency Power Amplifier and Oscillator -- Class C Telegraphy |
| + The athode of the GL    | <b>6183 C</b>   | Radio-frequency Power Amplifier and Oscillator -- Class C Telegraphy |
| Measured with a           | <b>6 C</b>      | Radio-frequency Power Amplifier and Oscillator -- Class C Telegraphy |
| up to                     | <b>900 MHz</b>  | Radio-frequency Power Amplifier and Oscillator -- Class C Telegraphy |
| Plate Input               | <b>1.12 kW</b>  | Plate-modulated Radio-frequency Power Amplifier - Class C Telsphony  |