

ELECTRONIC TUBE REFERENCE

4061

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA  
2 SECTIONS  
CONSTRUCTION  
TRIODE-TRIODE

Integrated dual-triode L-band oscillator-amplifier assembly specifically designed for 1090 MHz airborne transponder service. Separate oscillator and amplifier sections share one compact assembly, providing pulsed microwave transmission for aircraft identification equipment.

GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | —             |
| NOMINAL HEATER      | 6.3 V / 660 mA    | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Dissimilar    |

SECTION RATINGS

|                                                  |        |
|--------------------------------------------------|--------|
| SECTION1 Triode                                  |        |
| MAXIMUM PLATE VOLTAGE                            | 1100 V |
| MAXIMUM PLATE DISSIPATION                        | 9 W    |
| MAXIMUM GRID DISSIPATION                         | 1 W    |
| Oscillator unit in integrated 1090-MHz assembly. |        |

|                                                 |        |
|-------------------------------------------------|--------|
| SECTION2 Triode                                 |        |
| MAXIMUM PLATE VOLTAGE                           | 1100 V |
| MAXIMUM PLATE DISSIPATION                       | 9 W    |
| MAXIMUM GRID DISSIPATION                        | 1 W    |
| MAXIMUM CATHODE CURRENT                         | 2 A    |
| Amplifier unit in integrated 1090-MHz assembly. |        |

Integrated L-band pencil-tube oscillator-amplifier assembly for 1090 MHz airborne transponder service.

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

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## Section 1 · Triode

| OTHER                         |                 |                  |
|-------------------------------|-----------------|------------------|
| PARAMETER                     | PUBLISHED VALUE | CONDITION / NOTE |
| Heater/filament voltage       | 6.3 V           | —                |
| Heater/filament current       | 660 mA          | —                |
| Operating frequency           | 1090 MHz        | Oscillator       |
| Maximum DC plate voltage      | 1100 V          | Oscillator       |
| Peak heater-cathode voltage   | 60 V            | Oscillator       |
| Duty factor maximum           | 0.01            | LongTerm         |
| Pulse duration                | 0.45 us         | Typical          |
| Peak oscillator grid current  | 500 mA          | —                |
| Peak oscillator plate current | 700 mA          | —                |

| CHARACTERISTIC |                 |                  |
|----------------|-----------------|------------------|
| PARAMETER      | PUBLISHED VALUE | CONDITION / NOTE |
| Tuning range   | 15 MHz          | Oscillator       |

1971 RCA HB3 BINDER 6 OF 7

## Section 2 · Triode

| OTHER                       |                 |                  |
|-----------------------------|-----------------|------------------|
| PARAMETER                   | PUBLISHED VALUE | CONDITION / NOTE |
| Operating frequency         | 1090 MHz        | Amplifier        |
| Maximum DC plate voltage    | 1100 V          | Amplifier        |
| Peak heater-cathode voltage | 60 V            | Amplifier        |
| Duty factor maximum         | 0.01            | LongTerm         |
| Pulse duration              | 0.45 us         | Typical          |
|                             |                 |                  |

| PARAMETER                      | PUBLISHED VALUE | CONDITION / NOTE |
|--------------------------------|-----------------|------------------|
| Peak amplifier cathode current | 2 A             | —                |
| Peak amplifier plate current   | 1.5 A           | —                |
| Useful peak power output       | 500 W           | 1090MHz          |

| CHARACTERISTIC |                 |                  |
|----------------|-----------------|------------------|
| PARAMETER      | PUBLISHED VALUE | CONDITION / NOTE |
| Tuning range   | 15 MHz          | Amplifier        |

## TUBE TINKER

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