



## ELECTRONIC TUBE REFERENCE

## 4J36

Specialized - Magnetron electronic tube

CONSOLIDATED TECHNICAL DATA

**1 SECTION**  
CONSTRUCTION  
**MAGNETRON**

Pulsed magnetron oscillator operating approximately 3.65–3.70 GHz for high-peak-power microwave service.

## GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | —             |
| NOMINAL HEATER      | 16 V / 3.1 A      | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

## SECTION RATINGS

|                                                                                                                                     |         |
|-------------------------------------------------------------------------------------------------------------------------------------|---------|
| <b>SECTION 1</b> Magnetron                                                                                                          |         |
| MAXIMUM PLATE VOLTAGE                                                                                                               | 30000 V |
| MAXIMUM PLATE DISSIPATION                                                                                                           | 1200 W  |
| MAXIMUM CATHODE CURRENT                                                                                                             | 70 A    |
| <i>Published ratings and characteristics promoted where clearly stated; identical repeated sections compressed when applicable.</i> |         |

Pulsed magnetron oscillator for the 3650–3700 MHz band.

## SOURCE OPERATING CONDITIONS

# 1938 Raytheon

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

1938 RAYTHEON

## Section 1 · Magnetron

| CHARACTERISTICS            |                      |                          |
|----------------------------|----------------------|--------------------------|
| PARAMETER                  | PUBLISHED VALUE      | CONDITION / NOTE         |
| Heater or filament voltage | <b>16 V</b>          | Published nominal value  |
| Heater or filament current | <b>3.1 A</b>         | Published nominal value  |
| Frequency range            | <b>3650–3700 MHz</b> | Published operating band |

| OTHER                     |                       |                                |
|---------------------------|-----------------------|--------------------------------|
| PARAMETER                 | PUBLISHED VALUE       | CONDITION / NOTE               |
| Maximum plate dissipation | <b>1200 W</b>         | Published maximum rating       |
| RF power output           | <b>1000 W</b>         | Published output condition     |
| Pulse duration            | <b>2.5 us</b>         | Published pulse condition      |
| Duty cycle                | <b>0.001 fraction</b> | Published duty-cycle condition |