



**RADIO MANUFACTURERS ASSOCIATION**  
**ENGINEERING DEPARTMENT**

Release No. 468

February 1, 1946

sponsor:  
General Electric Co.

**RMA TYPE**

**2C46**

The 2C46 is a three-electrode tube of the disk-seal type designed for use in a specific cavity for stable local-oscillator service between 1000 and 1200 megacycles.

**GENERAL CHARACTERISTICS**

Number of Electrodes 3

Electrical

Cathode - Indirectly Heated

Heater Voltage 6.3 Volts  
Heater Current 0.75 Amperes

Average Characteristics

Amplification Factor 60  
Grid-Plate Transconductance,  $I_b = 14$  ma 3500 Micromhos

Direct Interelectrode Capacitances

Grid-Plate 1.7 Micromicrofarads  
Grid-Cathode 2.2 Micromicrofarads  
Plate-Cathode, maximum 0.025 Micromicrofarads  
Cathode R-F Connection - Cathode 175 Micromicrofarads

Mechanical

Type of Cooling - Convection and Conduction

Maximum Seal Temperature 200 C  
Base Description 6-pin Octal  
Mounting Position Any  
Net Weight, approximate 3 Ounces  
Shipping Weight, approximate 3 Pounds

**MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS**

CW Oscillator

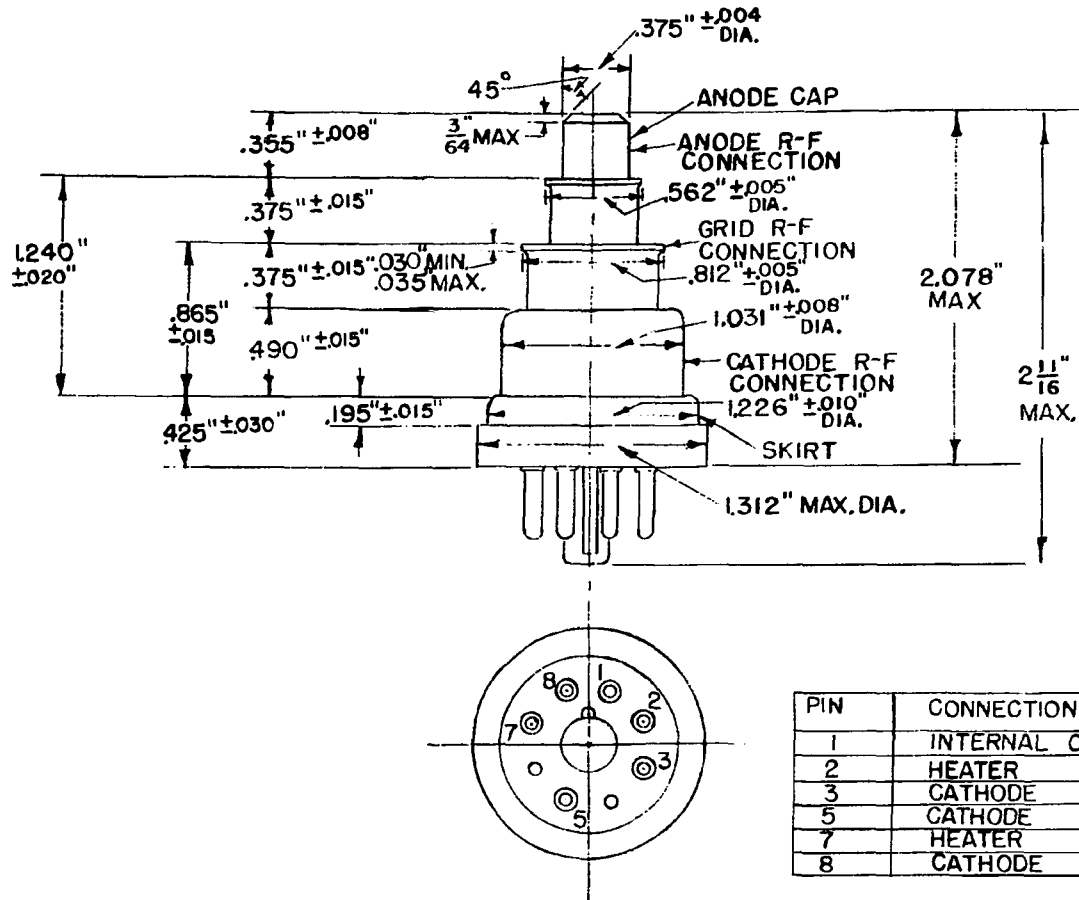
|                           | <u>Typical Operation</u> | <u>Maximum Ratings</u> |
|---------------------------|--------------------------|------------------------|
| D-c Plate Voltage         | 150                      | 500 Volts              |
| Grid Leak Resistance      | 0                        | Ohms                   |
| D-c Plate Current         | 8                        | 40 Milliamperes        |
| Plate Input               | 1.2                      | Watts                  |
| Plate Dissipation         | 1.18                     | 12 Watts               |
| Grid Current              | 3                        | Milliamperes           |
| Power Output, approximate | 20                       | Milliwatts             |
| Frequency                 | 1100                     | 1300 Megacycles        |

December 24, 1945.

# RMA TYPES

2C42

2C46



NOTE 1: GLASS SHALL NOT PROTRUDE BEYOND EDGE OF ANODE R-F CONNECTION OR GRID R-F CONNECTION

NOTE 2: EXPOSED METAL R-F PARTS TO BE PLATED WITH 100 MSI SILVER EXCEPT BASE PINS

NOTE 3: ANODE CAP, GRID R-F CONNECTION, AND CATHODE R-F CONNECTION TO BE CONCENTRIC WITH RESPECT TO EACH OTHER WITHIN  $\frac{1}{64}$  IN.