



*Excellence in Electronics*

## TYPE

## CK1024

The CK1024 is a gas-filled double diode with an ionically heated cathode designed for intermittent or "push-to-talk" service in portable and mobile transmitting equipment. Its principal application is as a full-wave power rectifier in equipment employing vibrator type power supplies. The CK1024 is capable of over twice as many starts at maximum output current as similar gas rectifiers with ionically heated cathodes.

### MECHANICAL DATA

ENVELOPE: MT-8 Metal

BASE: Small Wafer Octal 5-Pin

#### TERMINAL CONNECTIONS:

Pin 1 Shell

Pin 3 Plate #2

Pin 5 Plate #1

Pin 6 No Connection

Pin 8 Cathode

MOUNTING POSITION: Any

### ELECTRICAL DATA

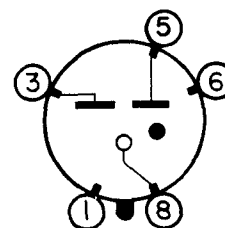
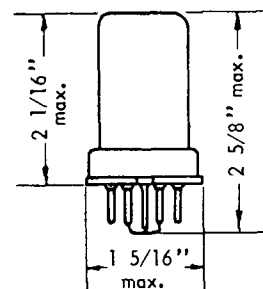
#### DESIGN CENTER MAXIMUM RATINGS:

|                                                                  |            |
|------------------------------------------------------------------|------------|
| Peak Inverse Plate Voltage                                       | 1000 volts |
| Peak Plate Current                                               | 480 ma.    |
| Absolute Minimum Peak Starting Voltage,<br>per Plate (Full-Wave) | 300 volts  |
| DC Output Current                                                | 175 ma.    |
| Absolute Minimum DC Output Current ■                             | 50 ma.     |
| Minimum Total Effective Plate Supply Impedance,<br>per Plate ♦   | 300 ohms   |

#### CHARACTERISTICS AND TYPICAL OPERATION ▲ - VIBRATOR OPERATION - FULL-WAVE:

|                                                     |              |
|-----------------------------------------------------|--------------|
| Peak Plate Voltage, per Plate ●                     | 500 volts    |
| Filter Input Condenser                              | 8 $\mu$ fds. |
| Total Effective Plate Supply Impedance, per Plate ♦ | 375 ohms     |
| Average Dynamic Voltage Drop                        | 24 volts     |
| DC Output Current                                   | 160 ma.      |
| DC Output                                           | 395 volts    |

- Under no circumstances should the tube be operated with less than 50 ma. of cathode current.
- ▲ Continuous or typical "push-to-talk" transmitter service as used in portable or mobile equipment
- Open circuit voltage - flat portion of vibrator - transformer voltage wave.
- ♦ Including vibrator, transformer, and wiring.



BOTTOM VIEW

4B

Tentative Data

# RAYTHEON MANUFACTURING COMPANY

## RECEIVING AND CATHODE RAY TUBE OPERATIONS

March 1, 1956

NEWTON 58, MASS.

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