

ELECTRONIC TUBE REFERENCE

K337

Specialized - Klystron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

KLYSTRON

Rugged reflex klystron designed for microwave local-oscillator service.

GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | —             |
| NOMINAL HEATER      | 6.3 V / 600 mA    | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

SECTION RATINGS

|                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SECTION1 Klystron                                                                                                                                                                            |
| <p>No fixed ratings recorded.</p> <p>Microwave/special-function section; schema has no directly applicable promoted electrode fields; published electrical data preserved in parameters.</p> |

Rugged reflex klystron for local oscillator service.

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1971 English Electric Valve

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

## 1971 ENGLISH ELECTRIC VALVE

## Section 1 · Klystron

| OTHER                  |                 |                                                   |
|------------------------|-----------------|---------------------------------------------------|
| PARAMETER              | PUBLISHED VALUE | CONDITION / NOTE                                  |
| Frequency range        | 10000 MHz       | Frequency range .« . . .« < . . .9000to 10000 MHz |
| Electronic tuningrange | 24 MHz          | Electronic tuningrange . . . . . 24 MHz           |
| Heater voltage         | 6.3             | Heater voltage 6.3 \                              |
| Heater current         | 600 mA          | Heater current 0.6 A                              |
| Heater voltage         | 4               | Heater voltage 5.8 6.8 \4                         |
| Resonator voltage      | 400             | Resonator voltage - 400 Vv                        |
| Resonator current      | 50 mA           | Resonator current . . = 50 mA                     |
| Heater voltage         | 6.3             | Heater voltage 6.3 \Y%                            |
| Resonator voltage      | 350             | Resonator voitage 350 \                           |
| Load v.s.w.r           | 1 v             | Load v.s.w.r. 1.1:1 max                           |

| CHARACTERISTIC                                                           |                 |                                                                          |
|--------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------|
| PARAMETER                                                                | PUBLISHED VALUE | CONDITION / NOTE                                                         |
| Heatercurrent                                                            | 610 mA          | Heatercurrent . . . . . 0.2 0.58 0.61 A                                  |
| Resonatorcurrent                                                         | 40 mA           | Resonatorcurrent . . . . . 25 35 40 mA                                   |
| Reflector voltage                                                        | -400            | Reflector voltage . . . . =250 - —400 \Y%                                |
| Mechanical tuningrange                                                   | 0 MHz           | Mechanical tuningrange . . 8000 — 10 000 MHz                             |
| frequency pulling                                                        | 10 MHz          | frequency pulling - 5.0 10 MHz                                           |
| output power                                                             | 15 mw           | output power . . . . . 15 — — mw                                         |
| frequency deviation                                                      | 2 MHz           | frequency deviation L. . = 1.6 2.0 MHz                                   |
| 1. Clockwise tuner rotation increases the frequency. The tuner torque is | 1               | 1. Clockwise tuner rotation increases the frequency. The tuner torque is |

| PARAMETER                                                                     | PUBLISHED VALUE | CONDITION / NOTE                                                              |
|-------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------|
| The reflector circuit impedance must not exceed 0.5M $\Omega$ . The reflector | <b>2</b>        | The reflector circuit impedance must not exceed 0.5M $\Omega$ . The reflector |
| tuner turns curve, plotted at 100MHz steps across the frequency range         | <b>100</b>      | tuner turns curve, plotted at 100MHz steps across the frequency range.        |
| optimum against tuner turns, plotted at 100MHz intervals across the           | <b>100</b>      | optimum against tuner turns, plotted at 100MHz intervals across the           |
| 10                                                                            | <b>1 a</b>      | 10. With a mismatch of v.s.w.r. 1.6:1, varied through all phases.             |