ELECTRONIC TUBE REFERENCE

CV5130

Specialized - Klystron electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
KLYSTRON

Rugged reflex klystron intended for microwave local-oscillator service where stable operation under demanding environmental conditions is required.

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

No fixed ratings recorded.

Microwave/special-function section; schema has no directly applicable promoted electrode fields; published electrical data preserved in parameters.

Rugged reflex klystron for local oscillator service.

SOURCE OPERATING CONDITIONS

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 voitage	**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£2. The reflector	**2**	The reflector circuit impedance must not exceed 0.5M£2. The reflector
tuner turns curve, plotted at 100MHz steps across the frequency range	**100**	tuner turns curve, plotted at 100MHz steps across the frequency range.
optimum against tuner turns, plotted at 100MHz intervals across the	**100**	optimum against tuner turns, plotted at 100MHz intervals across the
10	**1 a**	10. With a mismatch of v.s.w.r. 1.6:1, varied through all phases.