

ELECTRONIC TUBE REFERENCE

CV6003

Specialized - Klystron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
KLYSTRON

Rugged reflex klystron for local-oscillator service, intended for stable microwave generation in demanding electronic equipment.

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 kiystron 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	9000 MHz	Frequency range 8500 to 9000 MHz
Typical output power	45 mw	Typical output power 45 mw
Electronic tuning range	35 MHz	Electronic tuning range 35 MHz
Heater voltage	6.3	Heater voltage 6.3 V
Heater current	600 mA	Heater current 0.6 A
Heater voltage	6.8	Heater voltage b8 6.8
Resonator voltage	400	Resonator voltage ~— 400
Resonator current	50	Resonator current . . . e e e = 50
Heater voltage	63	Heater voltage . 63
Resonator voltage	350	Resonator voltage 350
Load v.s.w.r	1 v	Load v.s.w.r. 1.1:1 max

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater current	620 mA	Heater current 0.52 0.62 A
Resonator current	40 mA	Resonator current . . . 25 35 40 mA
Reflector voltage	-265	Reflector voltage . . . —140 - —265 V
Output power	45 mw	Output power . . . 30 45 mw
Mechanical tuning range	9000 MHz	Mechanical tuning range - 8500 — 9000 MHz
of frequency	-325 kHz	of frequency . . . - — —325 kHz/°C
frequency pulling	3 MHz	frequency pulling . . . — 3.0 MHz
output power	30	output power . . . 20 30 mW
frequency deviation	2 MHz	frequency deviation L. - 1.5 2.0 MHz

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
1. Clockwise rotation of the tuner increases the frequency. The tuner torque	1	1. Clockwise rotation of the tuner increases the frequency. The tuner torque
The reflector circuit impedance must not exceed 0.5Mff2. The reflector	2	. The reflector circuit impedance must not exceed 0.5Mff2. The reflector
With a mismatch of v.s.w.r. 1.5: 1, varied through all phases	1 a	. With a mismatch of v.s.w.r. 1.5: 1, varied through all phases.
$e-(1)-w $	1 w	$e-(1)-w $ REFLECTOR