ELECTRONIC TUBE REFERENCE

N1034S

Specialized - Microwave Tube electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
MICROWAVE

Q-type backward-wave oscillator, explicitly co-designated with N1034A, designed as a wide-band electronically tunable microwave source.

General characteristics

BASE DESIGNATION	A7-17	**BASE PINS**	7
NOMINAL HEATER	6.3 V / 2.4 A	**PARALLEL HEATER**	— / —
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Microwave

No fixed ratings recorded.

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

TA ers and ve osc ill ato rs for wide band Q-type pbackwar plitude modutati

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 · Microwave

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
rs, sui tab	**4.5**	rs, sui tab le for pulse oF am 2410 4.5
’ Frequency rang	**400**	’ Frequency rang - - - - 90 to 400
Heater voltage	**6.3**	Heater voltage 6.3 \
Heater current	**2.4 A**	Heater current 2.4 A
Cathode pre-heating tlme (rmmmum)	**2 min**	Cathode pre-heating tlme (rmmmum) 2.0 min
cathode to grid, anode and delay line	**10 pF**	cathode to grid, anode and delay line 10 pF
grid to cathode, anode and delay line	**15 pF**	grid to cathode, anode and delay line 15 pF
anode to cathode, grid and delay line	**16 pF**	anode to cathode, grid and delay line 16 pF
delay line to cathode, grid and anode	**10 pF**	delay line to cathode, grid and anode 10 pF
delay line to outer shell	**300 pF**	delay line to outer shell 300 pF
Heater voltage	**6.8**	Heater voltage 5.7 6.8 \
Heater starting current (peak)	**4 A**	Heater starting current (peak) — 4.0 A
Delay line voltage	**1500**	Delay line voltage 160 1500 \
Delay line dissipation	**50 W**	Delay line dissipation - 50 W
Anode current	**20 mA**	Anode current - 20 mA
Solencid voltage (N1034S)	**24**	Solencid voltage (N1034S) 16 24 \
Solencid current {N1034S)	**7 A**	Solencid current {N1034S) 3.0 7.0 A
Heater voltage	**6.3**	Heater voltage 6.3 \Y%
Grid voltage	**0**	Grid voltage 0 \Y

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Load v.s.w.r	**1 v**	Load v.s.w.r. 1.2:1 max
Heater current	**2.6 A**	Heater current 2.1 2.4 2.6 A
Anode current	**20 mA**	Anode current - 3.0 20 mA
Solenoid voltage	**24**	Solenoid voltage L. 16 21 24 Vv
The optimum anode voltage and solenoid current {for N1034S) are	**1034**	The optimum anode voltage and solenoid current {for N1034S) are
With a mismatch of v.s.w.r. 1.56:1, varied through all phases	**1 a**	With a mismatch of v.s.w.r. 1.56:1, varied through all phases.
bandwidth, centred at least 20MHz from the carrier	**20**	bandwidth, centred at least 20MHz from the carrier. For low noise
[020	**4**	[020 i | 4+ GRID VOLTAGE ov
. : ANODE VOLTAGE 150V	**150**	. : ANODE VOLTAGE 150V
3930	**3930**	3930 GRID VOLTAGE OV!
3931	**150**	3931 ! ANODE VOLTAGE 150V
1 Heater	**1**	1 Heater
2 Cathode	**2**	2 Cathode
3 Anode	**3**	3 Anode
4 Grid	**4**	4 Grid
7 Heater	**7**	7 Heater
1 Heater	**1**	1 Heater
2 Cathode	**2**	2 Cathode
<B>	**3**	<B> 3 Anode
4 Grid	**4**	4 Grid
5*	**5**	5* Delay line
7 Heater	**7**	7 Heater