



ELECTRONIC TUBE REFERENCE

4068

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

L-band cavity pencil-tube oscillator designed for pulsed operation around 1090 MHz. Its specialized construction and high-voltage pulse ratings suit compact airborne transponder and identification transmitter systems rather than general-purpose power amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 330 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
MAXIMUM PLATE VOLTAGE	1540 V
MAXIMUM PLATE DISSIPATION	15 W
MAXIMUM GRID DISSIPATION	1 W
MAXIMUM CATHODE CURRENT	1.2 A
<i>1090-MHz cavity pencil-tube oscillator.</i>	

L-band cavity pencil-tube oscillator for 1090 MHz pulsed operation.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 6 of 7

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

1971 RCA HB3 BINDER 6 OF 7

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	6.3 V	—
Heater/filament current	330 mA	—
Operating frequency	1090 MHz	—
Maximum DC plate voltage	1540 V	—
Maximum negative grid bias	100 V	Magnitude
Peak plate current	1.2 A	—
Peak grid current	700 mA	—
Plate dissipation	15 W	—
Grid dissipation	1 W	—
Peak heater-cathode voltage	60 V	BothPolarities
Duty factor maximum	0.01	—
Typical plate voltage	1400 V	1090MHz
Typical useful peak output	500 W	1090MHz

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tuning range	15 MHz	—

1999 Philips 0-D

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

1999 PHILIPS 0-D

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Capacitances Ca	4 pF	Capacitances Ca = 4,0 pF
Kapazitäten Cgr	3 pF	Kapazitäten Cgr = 3,0 pF
Cag1	0.2 pF	Cag1 = 0,2 pF
Vgz = max	45 V	Vgz = max. 45 V
vr = max.1	1 v	vr = max.1:1 v
Chauffage: direct par C.C. Ie	8.2 mA	Chauffage: direct par C.C. Ie = 8,2 mA
Kapazitden Cgr	3 pF	Kapazitden Cgr = 3,0 pF
Va = max	45 V	Va = max. 45 V
Vg2 = 6,5 : 5,0	7.5 V	Vg2 = 6,5 : 5,0 = 7,5 V
f de croisement Vgy	1.15 V	f de croisement Vgy = =1,15 V %)
Vgz = < la valeur a laquelle Ig = 5 pA si Vg	-2.5 V	Vgz = < la valeur a laquelle Ig = 5 pA si Vg = -2,5V
der Wert bel dem Ia = 5 pa wenn Vgq	2.5 V	der Wert bel dem Ia = 5 pa wenn Vgq = =2,5 V
Va	0 v	Va = 0 v
Ver = 6,5 : 5,0	7.5 V	Ver = 6,5 : 5,0- 7,5 V
the value at which I = 5 pA when Vgy	2.5 V	the value at which I = 5 pA when Vgy = =2.5 V
Vga = la valeur a laquelle Iz = 5 pA si Vg1	-2.57 V	Vga = la valeur a laquelle Iz = 5 pA si Vg1 = -2,57V
der Wert bei dem Ta = 5 pA wenn Vgq1	-2.5 V	der Wert bei dem Ta = 5 pA wenn Vgq1 = -2,5 V
Published electrical value	0 s	0s (A% oy o€ 0z o 0
Published electrical value	0 s	0s (A 0 - 0f ' 02 "ol -0
Published electrical value	0 s	0s (A% 0z ol 0