

ELECTRONIC TUBE REFERENCE

7537

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRAVELINGWAVE

Traveling-wave microwave amplifier providing broadband RF gain through interaction between an electron beam and a slow-wave structure.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 800 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 TravelingWave	
MAXIMUM PLATE VOLTAGE	1500 V
MAXIMUM CATHODE CURRENT	55 mA
Published ratings, characteristics, operating conditions and special-service data reviewed.	

7537 is listed in the supplied Amperex material as a traveling-wave amplifier tube. Published electrical ratings and operating data were captured from the supplied table.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Amperex Condensed

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

1963 AMPEREX CONDENSED

Section 1 · TravelingWave

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	6.3 V	Published rating
Heater/filament current	800 mA	Published rating
Frequency range minimum	4.4 GHz	TravelingWaveAmplifier
Frequency range maximum	5 GHz	TravelingWaveAmplifier
Gain	34 dB	TravelingWaveAmplifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Helix voltage	1100 V	TravelingWaveAmplifier
Magnetic field	600 gauss	TravelingWaveAmplifier
Power output	3.5 W	TravelingWaveAmplifier

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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 · TravelingWave

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency minimum	4400 Mc/s	—
Frequency maximum	5000 Mc/s	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Saturated output power minimum	6 W	—
Heater voltage	6.3 V	—
Heater current	800 mA	—
Low-level gain minimum	36 dB	5000Mc/s

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode voltage maximum	1500 V	—
Collector dissipation maximum	70 W	—
Helix current maximum	4 mA	—
verstirker im Frequenzbereich	5000 MHz	PublishedLine: verstirker im Frequenzbereich 4400 bis 5000 MHz vor-
Heizung indirekt Ir	800 mA	PublishedLine: Heizung : indirekt Ir = 800 mA
Wy (Igo1	50 mA	PublishedLine: Wy (Igo11 = 50 mA) = min, 6 W
Low level gain f	5000 Mc/s	PublishedLine: Low level gain f = 5000 Mc/s
Tace	0.35 mA	PublishedLine: Tace < 0,35 mA
Iy max	55 mA	PublishedLine: Iy = max. 55 mA Iy = max. 4 mA
Dans une gamme de	20 MHz	PublishedLine: Dans une gamme de 20 MHz les reflex1ons resultent en une
limite maximale de	4 mA	PublishedLine: limite maximale de 4 mA.
courant d h lice ne d passe la valeur de	4 mA	PublishedLine: courant d'hélice ne dépasse la valeur de 4 mA.
weniger als	20 MHz	PublishedLine: weniger als 0,1 mupSek liber ein Band von 20 MHz.
der Rohre ist es wichtig den Grenzwert von	4 mA	PublishedLine: der Rohre ist es wichtig, den Grenzwert von 4 mA des

TUBE TINKER

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