

ELECTRONIC TUBE REFERENCE

HWE301

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRAVELINGWAVE

Low-noise traveling-wave microwave amplifier covering approximately 2.6–3.2 GHz, with at least 20 dB gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	2.5 V / 700 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 TravelingWave	
MAXIMUM CATHODE CURRENT	1 mA
Published ratings and characteristics promoted where clearly stated.	

A microwave traveling-wave tube intended for RF amplification; the source specifies its operating frequency range, heater requirements, static electrode conditions, and RF performance.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1953 RFT Rundfunk Technik

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

1953 RFT RUNDFUNK TECHNIK

Section 1 · TravelingWave

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
von	2.6 GHz	von 2,6 GHz bis 3,2 GHz mit geringem Eigenrauschen. Sie kann in
Anheizzeit ba 2	2 min	Anheizzeit ba 2 2 min
Kaltdämpfung D >	40 dB	Kaltdämpfung D > 40 dB
* 10 }	1 A	* 10 }1A
z	4 mW	z 4 mW
(bei P _{in} = 20 }	1 W	(bei P _{in} = 20 }1W)
Wendelstrom I _{h max} X, . 50 }	1 A	Wendelstrom I _{h max} X, . 50 }1A

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequenzbereich f 2,6	3.2 GHz	Frequenzbereich f 2,6...3,2 GHz
Rauschfaktor F s	10 dB	Rauschfaktor F s 10 dB
HF-Ausgangsleistung P _{out} 2	1 mW	HF-Ausgangsleistung P _{out} 2 1 mW
ganzen Frequenzbereich	600 MHz	ganzen Frequenzbereich 600 MHz -
Frequenz f	2.9 GHz	Frequenz f 2,9 GHz
Kollektorspannung U _c	450 V	Kollektorspannung U _c 450 V
Anodenspannung U _g ca	60 V	Anodenspannung U _g ca. 60 V
Wehneltspannung U _w	12 V	Wehneltspannung U _w 12 V
Verstärkung G 2	20 dB	Verstärkung G 2 20 dB
Rauschfaktor F S	10 dB	Rauschfaktor F S 10 dB
Katodenstrom I _{k nax} X,	1 mA	Katodenstrom I _{k nax} X, 1 mA

TUBE TINKER

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