

ELECTRONIC TUBE REFERENCE

7638

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 / 500 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1	TravelingWave
No fixed ratings recorded. Promoted values are taken directly from the supplied datasheet; additional ratings, characteristics and operating points are preserved in TUBE_SECTION_PARAMETER.	

Unpackaged traveling-wave tube for broadband low-power microwave amplification from 7.0 to 11.5 GHz.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Mullard

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

1963 MULLARD

Section 1 · TravelingWave

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode1 voltage maximum	200 V	—
Anode2 voltage maximum	400 V	—
Helix voltage maximum	1400 V	—
Collector voltage maximum	1500 V	—
Collector current maximum	600 uA	—
Collector dissipation maximum	900 mW	—
Input signal maximum	500 mW	—
Frequency minimum	7 GHz	—
Frequency maximum	11.5 GHz	—
Frequency	9 GHz	—
Focus-electrode voltage	-70 V	f=9GHz
Anode1 voltage	155 V	f=9GHz
Anode2 voltage	135 V	f=9GHz
Helix voltage	1250 V	f=9GHz
Collector voltage	1350 V	f=9GHz
Collector current	550 uA	f=9GHz
Gain	27 dB	f=9GHz
Noise factor	23 dB	f=9GHz
Power output	50 uW	f=9GHz

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Gain minimum	20 dB	LowPowerLevel

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Noise factor maximum	25 dB	—
Saturation output power maximum	6 mW	—

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

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