

ELECTRONIC TUBE REFERENCE

F7067

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRAVELINGWAVE

Pulsed traveling-wave power amplifier designed for wideband microwave service, with grid control and approximately 30 dB nominal gain.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION1	TravelingWave
No fixed ratings recorded. Published maximum ratings and characteristics audited; remaining values retained densely in parameter table.	

The F7067 is a one-watt pulsed traveling-wave amplifier covering approximately 8 to 12 GHz. It uses a rugged metal envelope, helix slow-wave structure, and integral matching circuits for broadband microwave amplification.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 ITT

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

1962 ITT

Section 1 · TravelingWave

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
The F [1]	7067	The F-7067 is a 1 watt pulse traveling wave amplifier tube having 30 db gain
The F [2]	1	The F-7067 is a 1 watt pulse traveling wave amplifier tube having 30 db gain
The F [3]	30	The F-7067 is a 1 watt pulse traveling wave amplifier tube having 30 db gain
and [1]	8	and 8.0 to 12.0 kmc frequency range. It is constructed in a rugged metal
and [2]	12	and 8.0 to 12.0 kmc frequency range. It is constructed in a rugged metal
Published value	4	.04, A grid suitable for pulsing is provided.
Heater Voltage [1]	6.3 V	Heater Voltage 6.3 (±10%) volts
Heater Voltage [2]	10 V	Heater Voltage 6.3 (±10%) volts
Heater Current	2.3 A	Heater Current 2.3 amperes
Maximum Anode Voltage (Note [1])	1 V	Maximum Anode Voltage (Note 1) 4500 volts
Maximum Anode Voltage (Note [2])	4500 V	Maximum Anode Voltage (Note 1) 4500 volts
Maximurn Helix Current (Note [1])	2 A	Maximurn Helix Current (Note 2) 15 ma peak
Maximurn Helix Current (Note [2])	15 A	Maximurn Helix Current (Note 2) 15 ma peak
Maximum Collector Dissipation (beam power)	10 W	Maximum Collector Dissipation (beam power) 10 watts
Maximum Grid Voltage (Note [3])	3 V	Maximum Grid Voltage (Note 3)
Maximum Frequency	12	Maximum Frequency 12.0 kmec
Minimum Frequency	8	Minimum Frequency 8.0 kmc

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Voltage	3600 V	Anode Voltage 3600 volts
Anode Current	50 A	Anode Current 50 ma peak
Helix Current	5 A	Helix Current 5 ma peak
Applied Voltage Pulse	120 V	Applied Voltage Pulse 120 wvolts peak
Power Output (nominal) (Note [1])	4 W	Power Output (nominal) (Note 4) 1 watts peak
Power Output (nominal) (Note [2])	1 W	Power Output (nominal) (Note 4) 1 watts peak
Gain (nominal)	30	Gain (nominal) 30 db
Note	1 V	Note 1: All voltages shown are with respect to cathode. Anode and collector
Note	2 V	Note 2: Initial adjustments of voltage and magnetic field may be made at
low duty cycles	5 A	low duty cycles. 5 ma helix current must not be exceeded at maxi-
Note	3 V	Note 3: Positive voltage must not be applied to the grid in the absence of
Note [1]	4 W	Note 4: 2 watts power output at 30 db gain can be obtained from 8.0 to
Note [2]	2 W	Note 4: 2 watts power output at 30 db gain can be obtained from 8.0 to
Note [3]	30 W	Note 4: 2 watts power output at 30 db gain can be obtained from 8.0 to
Note [4]	8 W	Note 4: 2 watts power output at 30 db gain can be obtained from 8.0 to
o	1	o 1 Green Grid
Published value [1]	5	5O 2 2 Brown Heater
Published value [2]	2	5O 2 2 Brown Heater
Published value [3]	2	5O 2 2 Brown Heater
Published value	3	3 Yellow Heater-Cathode