

ELECTRONIC TUBE REFERENCE

EM116

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRAVELINGWAVE

Eimac traveling-wave tube with published high-voltage pulsed operating conditions; available source text provides limited application detail.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 3 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 TravelingWave
No fixed ratings recorded.
Promoted fields populated only where the published value maps directly to the schema; device-specific values retained as parameters.

Pulse Cathode Voltage 7.0 Volts Peak Cathode Current —8000 vdc Duty Cycle 2.0 adc Filament Current 6.3 Volts Cathode Voltage 3.0 Amperes = —7500 Vdc Duty Cycle 1.3 adc

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 Eimac

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

1962 EIMAC

Section 1 · TravelingWave

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
The EM1 [1]	16	The EM116isa 2% duty cycle TWT
The EM1 [2]	2	The EM116isa 2% duty cycle TWT
providing	1.6 kW	providing 1.6 kw of power
over the frequency range of [1]	2.9	over the frequency range of 2.9-3.1
over the frequency range of [2]	-3.1	over the frequency range of 2.9-3.1
Pulse Cathode Voltage	7 V	Pulse Cathode Voltage 7.0 Volts
Peak Cathode Current	-8000 V	Peak Cathode Current —8000 vdc
Duty Cycle	2 A	Duty Cycle 2.0 adc
Filament Current	6.3 V	Filament Current 6.3 Volts
Cathode Voltage	3 A	Cathode Voltage 3.0 Amperes
Duty Cycle	1.3 A	Duty Cycle 1.3 adc
Small Signal Gain—Minimum _ [1]	2.9	Small Signal Gain—Minimum _ 2.9-3.1 Ge
Small Signal Gain—Minimum _ [2]	-3.1	Small Signal Gain—Minimum _ 2.9-3.1 Ge
Saturated Power Out—Minimum	36 dB	Saturated Power Out—Minimum 36 db
Saturated Gain~Minimum	1.6 kW	Saturated Gain~Minimum 1.6 kw
Temperature [1]	-65	Temperature . —65 °Cto +125°C
Temperature [2]	125	Temperature . —65 °Cto +125°C

TUBE TINKER

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and their source documents.

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