

ELECTRONIC TUBE REFERENCE

EM108

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRAVELINGWAVE

Eimac traveling-wave tube with published high-voltage cathode-pulsed operating conditions and low duty cycle; available source text does not establish a narrower application description.

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.

Filament Voltage = = = . 7.0 Volts Cathode Voltage = . . o —8000 vdc Peak Cathode Current = = =
Pulse Grid Voltage 2.0 adc @~ = +400 to —150 vdc Duty Cycte . . = S 2% Cathode Voltage = = = —
7500 vdc

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	8	The EM108 is an octave bandwidth puls
Filament Voltage = = ==	7 V	Filament Voltage = = == . 7.0 Volts
Cathode Voltage = . . o	-8000 V	Cathode Voltage = . . o —8000 vdc
Pulse Grid Voltage	2 A	Pulse Grid Voltage 2.0 adc
Duty Cycte . . = S	2	Duty Cycte . . = S 2%
Cathode Voltage = = = =	-7500 V	Cathode Voltage = = = = —7500 vdc
Grid Voltage (Beam ofy	1.3 A	Grid Voltage (Beam ofy . . . 1.3 Adc
Grid Voltage (Beam on) . = =	4200 V	Grid Voltage (Beam on) . = = 4200 Vdc
Frequency Range	2	Frequency Range . 2%
Peak Saturated Power Out—Minimum	36 dB	Peak Saturated Power Out—Minimum 36 db
Saturated Gain—Minimum =	1 kW	Saturated Gain—Minimum = . 1.0 kw
Grid Capacitance	30 dB	Grid Capacitance 30 db
Temperature o ~ [1]	65	Temperature o ~65°C to +125°C
Temperature o ~ [2]	125	Temperature o ~65°C to +125°C