



ELECTRONIC TUBE REFERENCE

F8386

Power - Triode (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

ITT water-cooled very-high-power transmitting triode for RF amplification, oscillation, and Class B modulation. Approximately 100 kW plate dissipation and 17 kV capability support enormous broadcast, communications, and industrial transmitter power.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	14.5 V / 350 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	17000 V
MAXIMUM PLATE DISSIPATION	100000 W
High-power transmitting triode section.	

The ITT F8386 is a water-cooled very-high-power transmitting triode for RF amplification, oscillation, and Class B modulation.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1964 RMA EIA

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

1964 RMA EIA

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Voltage	14.5 V	—
Filament Current	350 A	—
Minimum Filament Heating Time	15 s	—
Filament Cold Resistance	0.006 ohm	—
Amplification Factor	20 ratio	—
Grid-Plate Capacitance	85 pF	—
Grid-Filament Capacitance	120 pF	—
Plate-Filament Capacitance	6 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Starting Current	1000 A	—
Maximum Plate Dissipation	100 kW	—
Maximum DC Plate Voltage	17000 V	ClassB; AudioPowerAmplifier
Maximum Signal Power Output	165 kW	ClassB; PushPull; TwoTubes; AudioAmplifier
RF Power Output	136 kW	ClassC; PlateModulatedTelephony
RF Power Output	150 kW	ClassC; Telegraphy; CathodeDrive
RF Power Output	135 kW	ClassC; Telegraphy; GridDrive

TUBE TINKER

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

