

ELECTRONIC TUBE REFERENCE

F7012

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

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Forced-air-cooled ITT triode designed specifically for high-voltage pulse operation. Kilovolt plate capability and tens of amperes of peak cathode current make it a specialized pulsed-power device rather than a conventional continuous-wave output tube.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	15 V / 36 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
MAXIMUM PLATE VOLTAGE	17500 V
MAXIMUM PLATE DISSIPATION	1200 W
MAXIMUM CATHODE CURRENT	40 A
Published maximum ratings and characteristics audited; remaining numeric data retained densely in parameter table.	

The F7012 is a high-voltage power triode designed for pulsed operation as a radio-frequency power amplifier and oscillator.

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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
The F-T0	12 V	The F-T012 is a triode designed for use in high voltage pulse operation,
The anode is forced air cooled, capable of dissipating	2.5	The anode is forced air cooled, capable of dissipating 2.5 kilowatts
Filament Voltage	15 V	Filament Voltage 15 volts
Filament Current	36 A	Filament Current 36 amperes
Grid-Plate	142	Grid-Plate 14,2 puf
Grid-Filament	16.3	Grid-Filament 16.3 puf
Plate-Filament	1.9	Plate-Filament 1.9 puf
Plate Dissipation - kilowatts [1]	2.5 kW	Plate Dissipation - kilowatts 2.5 2.0 1.5
Plate Dissipation - kilowatts [2]	2 kW	Plate Dissipation - kilowatts 2.5 2.0 1.5
Plate Dissipation - kilowatts [3]	1.5 kW	Plate Dissipation - kilowatts 2.5 2.0 1.5
Maximum Glass Temperature	180	Maximum Glass Temperature 180° C.
D=C Plate Voltage	17.5 V	D=C Plate Voltage 17.5 kilovolts, max.
D-C Grid Voltage	-5 V	D-C Grid Voltage -5.0 kilovolts, wmax,
Peak Cathode Current	40 A	Peak Cathode Current 40 amperes, max.
Plate Dissipation#	1.2 kW	Plate Dissipation# 1.2 kilowatts
D-C Plate Voltage	15500 V	D-C Plate Voltage 15,500 volts
D=C Grid Voltage (during pulse) =	750 V	D=C Grid Voltage (during pulse) =750 volts
D=C Plate Current	200 mA	D=C Plate Current 0.20 amperes

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
D=C Grid Current	0 mA	D=C Grid Current .013 amperes
Power Qutput, approximate	90 kW	Power Qutput, approximate 90 kilowatts
F-T7	12 W	F-T7012 POWER TRIODE

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