



ELECTRONIC TUBE REFERENCE

F7206

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

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Large water- and air-cooled ITT power triode for high-power service. Approximately 20 kW plate dissipation, 12.5 kV plate capability, and very high peak cathode current suit demanding professional power systems.

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

SECTION 1 Triode	
MAXIMUM PLATE VOLTAGE	12500 V
MAXIMUM PLATE DISSIPATION	20000 W
<i>Published maximum ratings and characteristics audited; remaining values retained densely in parameter table.</i>	

The F7206 is a high-power industrial triode designed for class-C radio-frequency oscillator and power-amplifier service.

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
Hik TUBE DATA	7206 W	Hik TUBE DATA 7206 POWER TRIODE
The anode is capable of dissipation	20	The anode is capable of dissipation 20 kilowatts during Continuous Commercial
Service. Cooling	1	Service. Cooling is accomplished by circulating water on the anode and forced
Filament Voltage	7.5 V	Filament Voltage 7.5 volts
Filament Current	220 A	Filament Current 220 amperes
Filament Heating Time, minimum	5	Filament Heating Time, minimum 5 seconds
Peak Cathode Current (Note [1])	1 A	Peak Cathode Current (Note 1) 45 amperes
Peak Cathode Current (Note [2])	45 A	Peak Cathode Current (Note 1) 45 amperes
Grid-Plate	95	Grid-Plate 95 puf
Grid-Filament	42	Grid-Filament 42 puf
Plate-Filament	3	Plate-Filament 3.0 uuf
Note	1 A	Note 1: Represents maximum usable cathode current
Plate Dissipation [1]	8 kW	Plate Dissipation 8 12 16 20 kilowatts
Plate Dissipation [2]	12 kW	Plate Dissipation 8 12 16 20 kilowatts
Plate Dissipation [3]	16 kW	Plate Dissipation 8 12 16 20 kilowatts
Plate Dissipation [4]	20 kW	Plate Dissipation 8 12 16 20 kilowatts
Maximum Outgoing Water Temperature	70	Maximum Outgoing Water Temperature 70 °C
D-C Plate Voltage	12500 V	D-C Plate Voltage 12,500 volts max,

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
D-C Grid Voltage =	-1500 V	D-C Grid Voltage =-1,500 volts max.
D-C Plate Current	8 A	D-C Plate Current 8 amperes max.
D-C Grid Current¥*	6 A	D-C Grid Current¥* .6 amperes max.
Plate Dissipation	20 kW	Plate Dissipation 20 kilowatts max,
D-C Plate Voltage [1]	9500 V	D-C Plate Voltage 9,500 7,500 6,000 volts
D-C Plate Voltage [2]	7500 V	D-C Plate Voltage 9,500 7,500 6,000 volts
D-C Plate Voltage [3]	6000 V	D-C Plate Voltage 9,500 7,500 6,000 volts
Dp-C Grid Voltage [1]	-1 V	Dp-C Grid Voltage -1, 300 -1,200 ~«1,000 volts
Dp-C Grid Voltage [2]	300 V	Dp-C Grid Voltage -1, 300 -1,200 ~«1,000 volts
Dp-C Grid Voltage [3]	-1200 V	Dp-C Grid Voltage -1, 300 -1,200 ~«1,000 volts
Dp-C Grid Voltage [4]	1000 V	Dp-C Grid Voltage -1, 300 -1,200 ~«1,000 volts
Peak R-F Grid Voltage [1]	1850 V	Peak R-F Grid Voltage 1,850 1,700 1,500 volts
Peak R-F Grid Voltage [2]	1700 V	Peak R-F Grid Voltage 1,850 1,700 1,500 volts
Peak R-F Grid Voltage [3]	1500 V	Peak R-F Grid Voltage 1,850 1,700 1,500 volts
D-C Plate Current [1]	5.5 A	D-C Plate Current 5.5 5.2 5.5 amperes
D-C Plate Current [2]	5.2 A	D-C Plate Current 5.5 5.2 5.5 amperes
D-C Plate Current [3]	5.5 A	D-C Plate Current 5.5 5.2 5.5 amperes
D-C Grid Current, approx [1]	530 A	D-C Grid Current, approx. 530 53 .53 amperes
D-C Grid Current, approx [2]	53 A	D-C Grid Current, approx. 530 53 .53 amperes
D-C Grid Current, approx [3]	53 A	D-C Grid Current, approx. 530 53 .53 amperes
Driving Power, approx [1]	1000 W	Driving Power, approx. 1,000 900 800 watts
Driving Power, approx [2]	900 W	Driving Power, approx. 1,000 900 800 watts
Driving Power, approx [3]	800 W	Driving Power, approx. 1,000 900 800 watts
grid Dissipation, approx [1]	300 W	grid Dissipation, approx. 300 275 275 watts
grid Dissipation, approx [2]	275 W	grid Dissipation, approx. 300 275 275 watts
grid Dissipation, approx [3]	275 W	grid Dissipation, approx. 300 275 275 watts
Power Output, approx, [1]	35 kW	Power Output, approx, 35 28 22 kilowatts
Power Output, approx, [2]	28 kW	Power Output, approx, 35 28 22 kilowatts
Power Output, approx, [3]	22 kW	Power Output, approx, 35 28 22 kilowatts
Published value	600 W	600 watts., Grid dissipation approximates the
Frequency [1]	30	Frequency 30 ko 50 megacycles
Frequency [2]	50	Frequency 30 ko 50 megacycles

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
F	7206 W	F-7206 POWER TRIODE