



ELECTRONIC TUBE REFERENCE

F631A

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Large water-cooled ITT power triode for very-high-power low-frequency service. Approximately 25 kW plate dissipation and very high cathode-current capability suit major transmitter and industrial power systems operating in the lower RF range.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	28 V / 51 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
MAXIMUM PLATE DISSIPATION	25000 W
MAXIMUM CATHODE CURRENT	12.5 A
<i>Published maximum ratings and characteristics audited; remaining numeric data retained densely in parameter table.</i>	

Three-electrode power tube for radio-frequency power amplifier and oscillator service with a 25 kW water-cooled anode.

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
Published value	25 W	25 Kilowatts Plate Dissipation
The anode is water-cooled, capable of dissipating	25	The anode is water-cooled, capable of dissipating 25
) Filament Voltage	28 V	) Filament Voltage 28 Volts
p Filament Current	51 A	p Filament Current 51 Amperes
p Filament Starting Current	102 A	p Filament Starting Current 102 Amperes
) Peak Cathode Current	12.5 A	) Peak Cathode Current 12.5 Amperes
Grid-Plate	30	Grid-Plate 30 uuf
Grid-Filament	20	Grid-Filament 20 uuf
Plate-Filament	2.7	Plate-Filament 2.7 upf
Water Flow on Anode	10	Water Flow on Anode 10 GPM
Temperature	70	Temperature 70° C
Maximum Glass Temperature	150	Maximum Glass Temperature 150° C
Published value	25 W	25 Kilowatts Plate Dissipation and to the manufacturer.

1962 ITT Industrial and Transmitting Tubes

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

1962 ITT INDUSTRIAL AND TRANSMITTING TUBES

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum full-rating frequency	3 MHz	—
Cooling method	water	—

TUBE TINKER

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