



ELECTRONIC TUBE REFERENCE

F6921

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

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Very low-mu high-current ITT power triode for substantial Class B amplifier service. Approximately 30 kW plate dissipation, 15 kV capability, and multiampere current handling emphasize powerful linear and modulator operation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	5 V / 260 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
AMPLIFICATION FACTOR	4.25
MAXIMUM PLATE VOLTAGE	15000 V
MAXIMUM PLATE DISSIPATION	30000 W
<i>Published maximum ratings and characteristics audited; remaining numeric data retained densely in parameter table.</i>	

Three-electrode modulator tube with a circulating-water-cooled anode capable of 30 kW dissipation. Ratings are specified for audio-frequency use.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 ITT

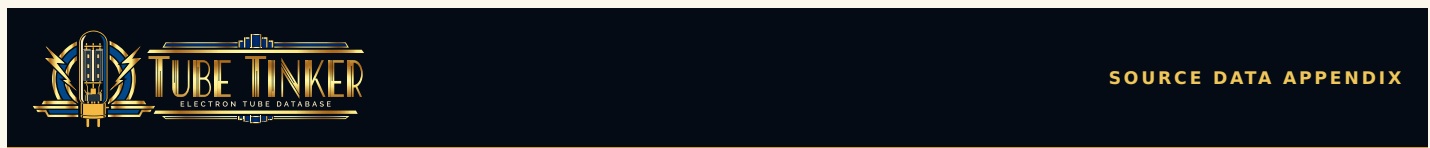
Published test conditions and operating points. Values on this page are preserved as reported by this source.

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Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
TUBE DATA r	6021 W	TUBE DATA r-6021 POWER
The anode is capable of dissipating	30 kW	The anode is capable of dissipating 30 kw during Continuous Commercial
Filament Voltage	5 V	Filament Voltage 5 volts
Filament Current	260 A	Filament Current 260 amperes
Grid-Plate	53	Grid-Plate 53 uuf
Grid-Filament	48	Grid-Filament 48 puf
Maximum Glass Temperature	180	Maximum Glass Temperature 180°c
D-C Plate Voltage	15 kV	D-C Plate Voltage 15 max, kv
Maximum Signal D-C Plate Current¥	10 A	Maximum Signal D-C Plate Current¥ 10 amperes
Maximum Signal Plate Input#*	60 kW	Maximum Signal Plate Input#* 60 kw
Plate Digsipation*	30 kW	Plate Digsipation* 30 kw
D-C Plate Voltage	10000 V	D-C Plate Voltage 10,000 volts
D-C Grid voltage	-2400 V	D-C Grid voltage -2,400 volts
Peak A-F Grid-to-Grid vVoltage	4680 V	Peak A-F Grid-to-Grid vVoltage 4,680 volts
Zero Signal D-C Plate Current	2 A	Zero Signal D-C Plate Current 2.0 amperes
Maximum Signal D-C Plate Current	9.5 A	Maximum Signal D-C Plate Current 9.5 amperes
Effective Load, Resistance Plate~to-Plate	1870	Effective Load, Resistance Plate~to-Plate 1870 ohms
Maximum Signal Driving Power	0 W	Maximum Signal Driving Power 0 watts
Maximm Signal Power Output	52.5 kW	Maximm Signal Power Output 52.5 kw

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
D-C Plate Voltage	12500 V	D-C Plate Voltage 12,500 volts
D~C Grid Voltage	-3200 V	D~C Grid Voltage -3,200 volts
Peak A-F grid-to-Grid Voltage	6100 V	Peak A-F grid-to-Grid Voltage 6,100 volts
Zero Signal D-C Plate Current	1.5 A	Zero Signal D-C Plate Current 1.5 amperes
Maximum Signal D-C Plate Current	45 A	Maximum Signal D-C Plate Current 4,5 amperes
Effective Il.oad Resistance Plate-to-Plate T4	0	Effective Il.oad Resistance Plate-to-Plate T400 ohms
Load Power Factor [1]	0 W	Load Power Factor 0 - 100%
Load Power Factor [2]	100 W	Load Power Factor 0 - 100%
Published value [1]	7 W	7 F-6921 POWER TRIODE
Published value [2]	6921 W	7 F-6921 POWER TRIODE



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GridPlateCapacitance	53 pF	—
GridFilamentCapacitance	48 pF	—
PlateFilamentCapacitance	7.5 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumSignalDCPlateCurrent	20 A	ClassAB
MaximumSignalPlateInput	60 kW	ClassAB

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
TypicalMaximumSignalPowerOutput	52.5 kW	ClassAB