ELECTRONIC TUBE REFERENCE

TY1220A

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

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRIODE

Forced-air-cooled high-power RF transmitting triode for substantial oscillator and amplifier service. Approximately 20 kW plate dissipation and 13 kV capability provide major professional radio-frequency power.

General characteristics

BASE DESIGNATION	—	**BASE PINS**	—
NOMINAL HEATER	8 V / 130 A	**PARALLEL HEATER**	— / —
HEATING	Direct	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Triode

TRANSCONDUCTANCE	0.03 S
AMPLIFICATION FACTOR	21
MAXIMUM PLATE VOLTAGE	13000 V
MAXIMUM PLATE DISSIPATION	20000 W
MAXIMUM GRID DISSIPATION	1100 W
MAXIMUM CATHODE CURRENT	5 A

Promoted from published Mullard absolute-maximum/limiting-value and characteristic tables; service-specific limits retained in parameter rows.

Forced-air-cooled high-power RF transmitting triode.

SOURCE OPERATING CONDITIONS

1963 Mullard

SOURCE PDF

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

1963 MULLARD

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
HeaterOrFilamentVoltage	**8 V**	—
HeaterOrFilamentCurrent	**130 A**	—
Grid To Plate Capacitance	**23.5 pF**	—
Input Capacitance	**45 pF**	—
Output Capacitance	**0.9 pF**	—
Transconductance	**30 mA/V**	—
Amplification Factor	**21**	—
Cooling	**Forced air**	—

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
MaximumOperatingFrequency	**30 MHz**	—
MaxPlateVoltage	**13 kV**	—
MaxCathodeCurrent	**5 A**	—
MaxGridVoltageMagnitude	**2 kV**	—
MaxGridCurrent	**1.5 A**	—
MaxPlateDissipation	**20 kW**	—
MaxGridDissipation	**1.1 kW**	—
Frequency	**30 MHz**	ClassC
Plate Voltage	**12 kV**	ClassC
Plate Current	**4.5 A**	ClassC
Grid Current	**900 mA**	ClassC
Plate Dissipation	**15 kW**	ClassC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Efficiency	**72.5 %**	ClassC

Tube Tinker

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

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