



ELECTRONIC TUBE REFERENCE

TYS53000

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

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Silica-envelope high-power RF triode for self-excited RF-heating oscillators and transmitting or industrial amplifiers. Approximately 3.5 kW plate dissipation and 6 kV capability support substantial industrial RF generation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	20.5 V / 26 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	2100 Ω
TRANSCONDUCTANCE	0.015 S
AMPLIFICATION FACTOR	32
MAXIMUM PLATE VOLTAGE	6000 V
MAXIMUM PLATE DISSIPATION	3500 W
MAXIMUM CATHODE CURRENT	2.8 A
<i>Promoted values are mapped from the supplied datasheet; additional published ratings, characteristics, capacitances and operating points are retained in TUBE_SECTION_PARAMETER.</i>	

Silica-envelope RF power triode rated for 3.5 kW plate dissipation, intended for self-excited RF heating oscillators and transmitting/industrial RF amplifiers.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Mullard

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

1963 MULLARD

Section 1 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	35 pF	—
Plate-to-filament capacitance	3.5 pF	—
Grid-to-filament capacitance	25 pF	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	15000 uS	Va=5kV;Ia=800mA
Amplification factor	32 ratio	Va=5kV;Ia=800mA
Plate resistance	2100 Ohm	Va=5kV;Ia=800mA

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum frequency	20 MHz	ReducedPlateVoltageAt20MHz
Plate voltage	6000 V	ClassC;Amplifier;f=3MHz
Plate current	2.33 A	ClassC;Amplifier;f=3MHz
Grid current	350 mA	ClassC;Amplifier;f=3MHz
Efficiency	75 %	ClassC;Amplifier;f=3MHz
RF output power	10.5 kW	ClassC;Amplifier;f=3MHz
RF output power	6.3 kW	ClassC;DielectricHeater;f=20MHz
RF output power	9.1 kW	ClassC;InductionHeater;f=450kHz

TUBE TINKER

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

