



ELECTRONIC TUBE REFERENCE

TY6800

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

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Radiation-cooled RF power triode designed particularly for industrial heating service around 50 MHz. Approximately 800 W plate dissipation and 7 kV capability support several kilowatts of continuous industrial RF output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 32.5 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
TRANSCONDUCTANCE	0.0050999999999999995 S
AMPLIFICATION FACTOR	22
MAXIMUM PLATE VOLTAGE	7000 V
MAXIMUM PLATE DISSIPATION	800 W
MAXIMUM GRID DISSIPATION	120 W
MAXIMUM CATHODE CURRENT	750 mA
Maximum ratings kept separate from typical operating characteristics; fixed fields use published maximum-rating values where clearly applicable.	

Radiation-cooled RF power triode for industrial heating, rated for about 2.7 kW continuous RF output and operation to 50 MHz.

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum frequency	50 MHz	FullRatings
Plate voltage	3000 V	ClassC;Oscillator;Continuous;f=50MHz
Plate current	700 mA	ClassC;Oscillator;Continuous;f=50MHz
Grid current	240 mA	ClassC;Oscillator;Continuous;f=50MHz
Plate dissipation	546 W	ClassC;Oscillator;Continuous;f=50MHz
Efficiency	74 %	ClassC;Oscillator;Continuous;f=50MHz
RF output power	1.55 kW	ClassC;Oscillator;Continuous;f=50MHz
Plate voltage	5000 V	ClassC;Oscillator;Continuous;f=50MHz
Plate current	700 mA	ClassC;Oscillator;Continuous;f=50MHz
RF output power	2.7 kW	ClassC;Oscillator;Continuous;f=50MHz

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	6.2 pF	—
Grid-to-filament capacitance	10.5 pF	—
Plate-to-filament capacitance	0.25 pF	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	9000 uS	Va=4kV
Amplification factor	22 ratio	Va=4kV

SOURCE OPERATING CONDITIONS

1963 Siemens

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

1963 SIEMENS

Section 1 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
C _{gk}	9.1 pF	—
C _{ak}	0.25 pF	—
C _{ga}	6.2 pF	—