

ELECTRONIC TUBE REFERENCE

C178

Power - Tetrode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TETRODE-TETRODE

Marconi twin tetrode designed for VHF Class-C amplifier and oscillator service to approximately 500 MHz. Two physical tetrode sections provide compact paired high-frequency power operation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	12.6 V / 900 mA	PARALLEL HEATER	6.3 V / 1.8 A
HEATING	Indirect	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Tetrode	
TRANSCONDUCTANCE	0.0045 S
MAXIMUM PLATE VOLTAGE	750 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	20 W

SECTION2 Tetrode	
TRANSCONDUCTANCE	0.0045 S
MAXIMUM PLATE VOLTAGE	750 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	20 W
Second identical physical tetrode section; added to align rows with SectionCount.	

Twin tetrode for VHF Class-C amplifier and oscillator service to 500 MHz.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1955 Marconi

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

1955 MARCONI

Section 1 · Tetrode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage Series	12.6 V	Both sections
Heater Current Series	900 mA	Both sections
Heater Voltage Parallel	6.3 V	Both sections
Heater Current Parallel	1.8 A	Both sections
Transconductance	4500 μ S	Per section

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Anode Voltage	750 V	Per section
Maximum Screen Voltage	250 V	Per section
Maximum Anode Dissipation	20 W	Per section
Maximum Frequency	500 MHz	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Anode Capacitance	0.1 pF	Per section
Input Capacitance	32 pF	—
Output Capacitance	10.5 pF	—
Screen Bypass Capacitance	2.1 pF	—

TUBE TINKER

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

