

ELECTRONIC TUBE REFERENCE

CAT22

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

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRIODE

Very-high-power water-cooled pure-tungsten transmitting triode for RF amplifier and oscillator service. Approximately 150 kW plate dissipation and 20 kV capability support enormous HF transmitter output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	32.5 V / 460 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.05 S
AMPLIFICATION FACTOR	45
MAXIMUM PLATE VOLTAGE	20000 V
MAXIMUM PLATE DISSIPATION	150000 W
MAXIMUM GRID DISSIPATION	8000 W
MAXIMUM CATHODE CURRENT	30 A
Applicable promoted ratings mapped semantically from the printed approximate-data/ratings tables; useful non-promoted operating, capacitance and service data retained in TUBE_SECTION_PARAMETER.	

Very-high-power water-cooled transmitting triode with pure-tungsten filament for RF amplifier/oscillator service to about 30 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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Starting Current Maximum	500 A	—
Anode Water Flow Minimum	40 gal/min	—
Cooling Water Outlet Temperature Maximum	65 C	—
Grid-Cathode Capacitance	100 pF	—
Anode-Cathode Capacitance	4.5 pF	—
Grid-Anode Capacitance	52 pF	—
Typical Plate Voltage	10000 V	ClassC
Typical Plate Voltage	15000 V	ClassC
Typical RF Output Power	64000 W	ClassC
Typical RF Output Power	108000 W	ClassC