



ELECTRONIC TUBE REFERENCE

BR161

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

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Industrial transmitting power triode intended for RF amplification, oscillation, or modulation. Manufacturer data emphasize substantial plate power, professional transmitter operation, and construction suited to continuous high-power service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	9 V / 175 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
TRANSCONDUCTANCE	0.023 S
AMPLIFICATION FACTOR	45
MAXIMUM PLATE VOLTAGE	12000 V
MAXIMUM PLATE DISSIPATION	15000 W
MAXIMUM GRID DISSIPATION	1000 W
MAXIMUM CATHODE CURRENT	45 A
<i>Highest published service maximums promoted; cooling and operating conditions preserved in parameters.</i>	

The Marconi BR161 is a forced-air-cooled thoriated-tungsten transmitting triode for hf amplifier and oscillator service.

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
Heater/filament voltage	9 V	—
Heater/filament current	175 A	—
Maximum plate voltage	12000 V	—
Maximum plate dissipation	15000 W	—
Maximum grid dissipation	1000 W	—
Maximum frequency at full ratings	50 MHz	—
Peak cathode current	45 A	—
Maximum filament starting current	450 A	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	45	—
Transconductance	23000 μ S	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-plate capacitance	36 pF	—
Plate-cathode capacitance	1.5 pF	—
Grid-cathode capacitance	57 pF	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cooling	Forced air	—

TUBE TINKER

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and their source documents.

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