



ELECTRONIC TUBE REFERENCE

33AI38A

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Twin power triode with identical sections usable in parallel or push-pull audio and RF stages. Published conditions cover Class A and Class B audio output as well as Class C transmitting service around 14 W.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	6.3 V / 800 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	4700 Ω
TRANSCONDUCTANCE	0.0029787234042553193 S
AMPLIFICATION FACTOR	14
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	5 W
MAXIMUM CATHODE CURRENT	50 mA
Representative row for two electrically identical triode sections.	

SECTION2 Triode	
PLATE RESISTANCE	4700 Ω
TRANSCONDUCTANCE	0.0029787234042553193 S
AMPLIFICATION FACTOR	14
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	5 W
MAXIMUM CATHODE CURRENT	50 mA
Identical second physical section; duplicated from representative section per physical-section-row policy.	

Twin triode with two identical sections for audio- and radio-frequency power-amplifier service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1947 Standard Valves

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

1947 STANDARD VALVES

Section 1 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GridToAnodeCapacitance	2.7 pF	—
GridToCathodeOrFilamentCapacitance	6 pF	—
AnodeToCathodeOrFilamentCapacitance	1.3 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Voltage	300 V	ClassA TwoSectionsParallel
Grid Bias	-13 V	ClassA TwoSectionsParallel
Plate Current	30 mA	ClassA TwoSectionsParallel
Power Output	1 W	ClassA TwoSectionsParallel
Power Output	1.2 W	ClassA PushPull
Power Output	12 W	ClassB PushPull TwoSections
Power Output	14 W	ClassC RF PushPull
MaximumFrequencyForFullRatings	100 MHz	—
MaximumOperatingFrequency	300 MHz	—