



ELECTRONIC TUBE REFERENCE

300B25

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

2.5 V-filament 300B-family mesh power triode intended for 2A3-like audio operating conditions. It combines low-mu, low-plate-resistance behavior with direct heating and provides several watts of single-ended Class A output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	UX4	BASE PINS	4
NOMINAL HEATER	2.5 V / 2.5 A	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
PLATE RESISTANCE	700 Ω
TRANSCONDUCTANCE	0.0056 S
AMPLIFICATION FACTOR	3.9
MAXIMUM PLATE VOLTAGE	450 V
MAXIMUM PLATE DISSIPATION	36 W
MAXIMUM CATHODE CURRENT	100 mA

300B-family mesh triode with 2.5 V heater for 2A3-compatible operating points. The supplied Emission Labs sheet was read for filament data, maximum ratings, representative operating points, gm/rp/mu, output conditions, capacitances, and rectifier filter conditions as applicable.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

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Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage	2.5 V	—
Filament current	2.5 A	—
Plate resistance	700 ohm	ClassA
Amplification factor	3.9	ClassA
Transconductance	5600 uS	ClassA

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Plate current	60 mA	ClassA
Grid voltage	-45 V	ClassA
Load resistance	2700 ohm	ClassA
Output power	3.5 W	ClassA
Electrical data reference	300BM	AllOtherData

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-plate capacitance	15 pF	—
Grid-filament capacitance	8.5 pF	—
Plate-filament capacitance	4 pF	—

TUBE TINKER

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

