



ELECTRONIC TUBE REFERENCE

5851

Power - Beam Single (NOT sweep) (under 10W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

Beam-power tube documented by National Union and GE literature; available source material establishes its power construction but does not clearly support a narrower specialized application.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6CL	BASE PINS	6
NOMINAL HEATER	2.5 V / 55 mA	PARALLEL HEATER	1.25 V / 110 mA
HEATING	Direct	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

6CL - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – F	–	F – Filament	CONNECTED
PIN3 – P	A	P – Plate (Anode)	CONNECTED
PIN5 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN5 – FCT	–	FCT – Filament Center Tap	CONNECTED
PIN6 – G2	A	G2 – Screen Grid	CONNECTED
PIN7 – F	–	F – Filament	CONNECTED
PIN8 – G1	A	G1 – Control Grid	CONNECTED

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	175000 Ω
TRANSCONDUCTANCE	0.0016 S
MAXIMUM PLATE VOLTAGE	180 V
MAXIMUM SCREEN VOLTAGE	135 V
MAXIMUM PLATE DISSIPATION	1.5 W
MAXIMUM CATHODE CURRENT	12 mA
<i>Promoted ratings/characteristics read from the approved National Union datasheet.</i>	

National Union 5851 beampower vacuum tube described in the approved datasheet for its stated amplifier, rectifier, indicator, or specialized electronic service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 National Union

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

1938 NATIONAL UNION

Section 1 · Beam Power

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage series	2.5 V	Center-tapped filament
Filament voltage parallel	1.25 V	Center-tapped filament



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Beam Power

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	2.5 pF	Section1
Output capacitance	3 pF	Section1
Grid-to-plate capacitance	0.055 pF	Section1

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	ClassA
Screen voltage	125 V	ClassA
Control-grid voltage	-7.5 V	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	5.5 mA	ClassA
Screen current	0.9 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	175000 Ω	ClassA
Transconductance	1600 μS	ClassA

TUBE TINKER

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

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker