

ELECTRONIC TUBE REFERENCE

8106

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

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

Industrial miniature beam-power tube designed as a frequency multiplier and driver in mobile communications equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9PL	BASE PINS	9
NOMINAL HEATER	13.5 V / 250 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9PL - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	–	P – Plate (Anode)	CONNECTED
PIN2	–	G3 – Suppressor Grid	CONNECTED
PIN2	–	K – Cathode	CONNECTED
PIN3	–	G2 – Screen Grid	CONNECTED
PIN4	–	H – Heater	CONNECTED
PIN5	–	H – Heater	CONNECTED
PIN6	–	G3 – Suppressor Grid	CONNECTED
PIN6	–	K – Cathode	CONNECTED
PIN7	–	G1 – Control Grid	CONNECTED
PIN8	–	G2 – Screen Grid	CONNECTED
PIN9	–	G3 – Suppressor Grid	CONNECTED
PIN9	–	K – Cathode	CONNECTED

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	90000 Ω
TRANSCONDUCTANCE	0.009 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	125 V
MAXIMUM PLATE DISSIPATION	6 W
MAXIMUM CATHODE CURRENT	40 mA
<i>Promoted from published ratings/characteristics where directly applicable; additional published values retained in TUBE_SECTION_PARAMETER.</i>	

Industrial miniature beam-power tube for use as a frequency multiplier and driver in mobile communications equipment.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1975 RCA RC30

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

1975 RCA RC30

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage 13.5	1.5 V	Published in approved 8106 target datasheet entry; Section1
Heater Current	250 mA	Published in approved 8106 target datasheet entry; Section1
Plate Voltage	330 V	Published in approved 8106 target datasheet entry; Section1
Plate Dissipation	6 W	Published in approved 8106 target datasheet entry; Section1
Grid-No.1 Current	3 mA	Published in approved 8106 target datasheet entry; Section1
Cathode Current	40 mA	Published in approved 8106 target datasheet entry; Section1
Plate Voltage	300 V	Published in approved 8106 target datasheet entry; Section1
Plate Resistance (Approx.)	90000 Ω	Published in approved 8106 target datasheet entry; Section1
Plate Current	16 mA	Published in approved 8106 target datasheet entry; Section1
Grid-No.1 Voltage (Approx.) for plate iiA = 100	-3.28 V	Published in approved 8106 target datasheet entry; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 to Plate	0.09 pF	Published in approved 8106 target datasheet entry; Section1
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	10 pF	Published in approved 8106 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate to Cathode, Heater, Grid No.2, and Grid No.3	2.8 pF	Published in approved 8106 target datasheet entry; Section1

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