

ELECTRONIC TUBE REFERENCE

5902WA

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

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

Special-quality subminiature beam pentode for rugged audio power-amplifier service, with military-style shock, vibration, and altitude ratings.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9DE	BASE PINS	8
NOMINAL HEATER	6.3 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9DE - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 2P	B	P – Plate (Anode)	CONNECTED
PIN2 – 2G1	B	G1 – Control Grid	CONNECTED
PIN3 – 2K	B	K – Cathode	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – H	–	H – Heater	CONNECTED
PIN6 – 1P	A	P – Plate (Anode)	CONNECTED
PIN7 – 1G1	A	G1 – Control Grid	CONNECTED
PIN8 – 1K	A	K – Cathode	CONNECTED
PIN9 – IS	A	IS – Internal Screen	CONNECTED

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	15000 Ω
TRANSCONDUCTANCE	0.0042 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	155 V
MAXIMUM PLATE DISSIPATION	3.7 W
MAXIMUM SCREEN DISSIPATION	0.4 W
MAXIMUM CATHODE CURRENT	50 mA
<i>Published maximum ratings and characteristics promoted from the approved source; repeated identical sections compressed where applicable.</i>	

Special-quality subminiature heater-cathode beam pentode for rugged audio power-amplifier service, with military-style shock, vibration and altitude ratings.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 Raytheon

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

1938 RAYTHEON

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	450 mA	Nominal
Maximum Plate Voltage	250 V	—
Maximum Plate Dissipation	3.7 W	—
Maximum Cathode Current	60 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	4200 μ S	Typical
Plate Resistance	15000 ohm	Typical



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 3 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 3 OF 4

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	450 mA	—
Peak plate voltage	360 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Altitude rating	80000 ft	—
Signal power output	1 W	ClassA
Maximum plate voltage	250 V	—
Maximum screen voltage	155 V	—
Maximum plate dissipation	3.7 W	—
Maximum screen dissipation	0.4 W	—
Maximum cathode current	50 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	110 V	—
Screen voltage	110 V	—
Cathode bias resistor	270 ohm	—
Plate current	30 mA	—
Screen current	2.2 mA	—