



ELECTRONIC TUBE REFERENCE

7580

Power - Beam (NOT sweep) (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

Forced-air-cooled ceramic-metal high-perveance radial-beam tetrode designed for linear RF power-amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6 V / 2.6 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Beam Power	
MAXIMUM PLATE VOLTAGE	2000 V
MAXIMUM SCREEN VOLTAGE	500 V
MAXIMUM PLATE DISSIPATION	250 W
MAXIMUM SCREEN DISSIPATION	12 W
MAXIMUM GRID DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	250 mA
<i>Promoted fields populated from published ratings/characteristics; additional published values retained in TUBE_SECTION_PARAMETER.</i>	

7580 is listed in the supplied Amperex material as a forced-air-cooled ceramic/metal beam-power tetrode for linear RF service. Published electrical ratings and operating data were captured from the supplied table.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1940 RCA

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

1940 RCA

Section 1 · Beam Power

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	6 V	Published nominal value
Heater or filament current	2.6 A	Published nominal/aggregate value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	250 W	Published maximum rating
Peak-envelope RF power output	400 W	30 MHz
Peak-envelope RF power output	360 W	500 MHz
Maximum frequency	500 MHz	Published



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 Eimac

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

1962 EIMAC

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current	2.3 A–2.9 A	—
Heating Time	30–40 s	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode-Heater Potential Maximum	4150 V	—
Frequency for Maximum Ratings	500 MHz	—
Maximum DC Plate Current	250 mA	—
Typical SSB Peak Envelope Power	470 W	ClassAB1;SingleSideband
Typical AF Push-Pull Output Power	595 W	ClassAB1;PushPull;TwoTubes

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input Capacitance	16–18.5 pF	—
Output Capacitance	4–5 pF	—
Grid-Plate Capacitance Maximum	0.06 pF	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Amperex Condensed

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

1963 AMPEREX CONDENSED

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	6.3 V	Published rating
Heater/filament current	2.6 A	Published rating
Amplification factor	4	TransmittingService

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	250 W	TransmittingService
Plate voltage	2000 V	TransmittingService

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	250 mA	TransmittingService
Power output	360 W	TransmittingService
Screen voltage	250 V	TransmittingService
Grid current	50 mA	TransmittingService
Maximum frequency	400 MHz	TransmittingService



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Eimac Tube Manual

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

1965 EIMAC TUBE MANUAL

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current Range	2.3 A–2.9 A	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode-Heater Voltage Maximum	150 V	—
Grid-Plate Capacitance Maximum	0.06 pF	—
Frequency Maximum	500 MHz	—
Two-Tone Peak Envelope Output	470 W	—
Two-Tube Audio Output	595 W	—
Heater Warmup Minimum	30 s	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input Capacitance Range	16–18.5 pF	—
Output Capacitance Range	4–5 pF	—