

ELECTRONIC TUBE REFERENCE

6046

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
BEAMPOWER

Beam-power pentode designed for applications requiring relatively high plate current from low plate and screen supply voltages.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7AC	BASE PINS	7
NOMINAL HEATER	25 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7AC - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – Pin 1	–	–	NC · verified
PIN2 – Pin 2	–	H – Heater	CONNECTED · verified
PIN3 – Pin 3	A	P – Plate (Anode)	CONNECTED · verified
PIN4 – Pin 4	A	G2 – Screen Grid	CONNECTED · verified
PIN5 – Pin 5	A	G1 – Control Grid	CONNECTED · verified
PIN7 – Pin 7	–	H – Heater	CONNECTED · verified
PIN8 – Pin 8	A	BP – Beam-Forming Plate	CONNECTED · verified
PIN8 – Pin 8	A	K – Cathode	CONNECTED · verified

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	13000 Ω
TRANSCONDUCTANCE	0.008 S
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM SCREEN VOLTAGE	125 V
MAXIMUM PLATE DISSIPATION	10 W
MAXIMUM SCREEN DISSIPATION	1.9 W
MAXIMUM HEATER-CATHODE VOLTAGE	150 V
Beam-power amplifier; Class-A and relay-energizer conditions preserved as parameters.	

Power pentode for applications requiring relatively high plate current at low plate and screen supply voltages.

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	200 V	ClassA
Screen voltage	125 V	ClassA
Control-grid bias or cathode resistor	180 V	ClassA
Plate current	46 mA	ClassA
Screen current	2.2 mA	ClassA
Plate resistance	28000 ohm	ClassA
Transconductance	8000 uS	ClassA
Load resistance	1000 ohm	ClassA
Power output	3.8 W	ClassA
Plate voltage	110 V	ClassA
Screen voltage	110 V	ClassA
Control-grid bias or cathode resistor	-7.5 V	ClassA
Plate current	49 mA	ClassA
Screen current	4 mA	ClassA
Plate resistance	13000 ohm	ClassA
Transconductance	8000 uS	ClassA
Load resistance	2000 ohm	ClassA
Power output	2.1 W	ClassA
Plate supply voltage	115 V	RelayEnergizer
Screen supply voltage	115 V	RelayEnergizer

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Control-grid bias	0 V	RelayEnergizer
Plate current	105 mA	RelayEnergizer
Screen current	12.8 mA	RelayEnergizer
Load resistance	500 ohm	RelayEnergizer



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltageNominal	25 V	—
HeaterOrFilamentCurrentNominal	300 mA	—
PlateVoltage200Volts	200 V	Published datasheet table
SereenVoltage125Volts	125 V	Published datasheet table
PlateDissipation10Watts	10 W	Published datasheet table
ScreenDissipation19Watts	1.9 W	Published datasheet table
PeakHeaterCathodeVoltage150Volts	150 V	Published datasheet table

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PlateVoltage110200VoltsValue1	110 V	Published datasheet table
PlateVoltage110200VoltsValue2	200 V	Published datasheet table
ScreenVoltage110125VoltsValue1	110 V	Published datasheet table

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
ScreenVoltage110125VoltsValue2	125 V	Published datasheet table
GridNo1Voltage75VoltsValue1	1 V	Published datasheet table
GridNo1Voltage75VoltsValue2	-7.5 V	Published datasheet table
CathodeBiasResistor1800hms	180 0hm	Published datasheet table
PeakAFGridNo1Voltage7585VoltsValue1	1 V	Published datasheet table
PeakAFGridNo1Voltage7585VoltsValue2	7.5 V	Published datasheet table
PeakAFGridNo1Voltage7585VoltsValue3	8.5 V	Published datasheet table
PlateResistanceApproximate13000280000hmsValue1	13000 0hm	Published datasheet table
PlateResistanceApproximate13000280000hmsValue2	28000 0hm	Published datasheet table
Transconductance80008000MicromhesValue1	8000	Published datasheet table
Transconductance80008000MicromhesValue2	8000	Published datasheet table
MaximumSignalPlateCurrent5047MilliamperesValue1	50 mA	Published datasheet table
MaximumSignalPlateCurrent5047MilliamperesValue2	47 mA	Published datasheet table
ZeroSignalScreenCurrent4022MilliamperesValue1	4 mA	Published datasheet table

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
ZeroSignalScreenCurrent4022MilliamperesValue2	2.2 mA	Published datasheet table
MaximumSignalScreenCurrent10035MilliamperesValue1	10 mA	Published datasheet table
MaximumSignalScreenCurrent10035MilliamperesValue2	3.5 mA	Published datasheet table
LoadResistance200040000hmsValue1	2000 Ohm	Published datasheet table
LoadResistance200040000hmsValue2	4000 Ohm	Published datasheet table
TotalHarmonicDistortionApproximate1010PercentValue1	10 %	Published datasheet table
TotalHarmonicDistortionApproximate1010PercentValue2	10 %	Published datasheet table
PowerOutput2138WattsValue1	2.1 W	Published datasheet table
PowerOutput2138WattsValue2	3.8 W	Published datasheet table
PlateSupplyVoltage115Volts	115 V	Published datasheet table
ScreenSupplyVoltage115Volts	115 V	Published datasheet table
GridNo1CircuitResistance2MegohmsValue1	1 MOhm	Published datasheet table
GridNo1CircuitResistance2MegohmsValue2	2 MOhm	Published datasheet table
GridNc1BlasVoltage0VoltValue1	1 V	Published datasheet table

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GridNc1BlasVoltage0VoltValue2	0 V	Published datasheet table
PlateCurrent105Milliamperes	105 mA	Published datasheet table
ScreenCurrent128Milliamperes	12.8 mA	Published datasheet table
PlateCurrentForEcq25VoltsApproximate01MilllampereValue1	-25 V	Published datasheet table
PlateCurrentForEcq25VoltsApproximate01MilllampereValue2	0.1 V	Published datasheet table
NotExceed01MegohmForFixedBlas0peratlonAnd05MegohmForCathodeBiasValue1	0 megohm	Published datasheet table
NotExceed01MegohmForFixedBlas0peratlonAnd05MegohmForCathodeBiasValue2	1 megohm	Published datasheet table
NotExceed01MegohmForFixedBlas0peratlonAnd05MegohmForCathodeBiasValue3	0.5 megohm	Published datasheet table
SCREENCURRENT1020rORIDNUMBER1CURRENTIINMILLIAMPERESValue1	102 mA	Published datasheet table
SCREENCURRENT1020rORIDNUMBER1CURRENTIINMILLIAMPERESValue2	1 mA	Published datasheet table

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