

6180

Voltage - Dual Triode (similar) electronic tube

Rugged double triode designed for trustworthy operation under vibration and mechanical shock, electrically similar to the 6SN7GT family but with reduced maximum ratings.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8BD	BASE PINS	8
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

8BD - TERMINAL PINOUT

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

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	9100 Ω
TRANSCONDUCTANCE	0.0022 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	300 V
<i>Primary electrical section; identical repeated sections compressed where applicable.</i>	

SECTION2 Triode	
PLATE RESISTANCE	9100 Ω
TRANSCONDUCTANCE	0.0022 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	300 V
<i>Second physical triode restored.</i>	

The 6180 is a double triode designed for trustworthy operation under conditions of vibration and mechanical shock. The heaters of the two triode units are connected in series, so that failure of either heater renders both units inoperative. The electrical characteristics are similar to the 6SN7GT, but the maximum ratings have been reduced. Coated unipotential cathode, Outline drawing 9-3 Bulb base T-9 BASE Maximum diameter 1 1/4" Maximum overall length 2 7/8" Maximum seated height 2 5/16"



SOURCE OPERATING CONDITIONS

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1954 STC Brimar

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

1954 STC BRIMAR

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate to Cathode eececcrcnrecsrccsvesssnvoseccssarsasssssenes 207 uuf	207 pF	Plate to Cathode eececcrcnrecsrccsvesssnvoseccssarsasssssenes 207 uuf
Yaximum heater-cathode voltage c.eecesecvesseccscscccsvesase 30 Volts	30 V	Yaximum heater-cathode voltage c.eecesecvesseccscscccsvesase 30 Volts
Moximum negative grid voltage c.ieceecescsccssnrcnaceeascsess 100 volts	100 V	Moximum negative grid voltage c.ieceecescsccssnrcnaceeascsess 100 volts
Grid VOIta.ge Cesesrsssese rensssssrusesenses ¢ -9 volts	-9 V	Grid VOIta.ge Cesesrsssese rensssssrusesenses ¢ -9 volts

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current for grid voltage of -24 volts 1%A Max.	-24 V	Plate current for grid voltage of -24 volts 1%A Max.



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 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	2.3 pF	Section1
Output capacitance	2.5 pF	Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	3.5 pF	Section1
Input capacitance	2.6 pF	Section2
Output capacitance	2.7 pF	Section2
Grid-to-plate capacitance	3.3 pF	Section2

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Grid voltage	-9 V	ClassA
Plate current	6.5 mA	ClassA
Plate voltage	100 V	ClassA
Grid voltage	0 V	ClassA
Plate current	10.6 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	9100 ohm	At250V
Transconductance	2200 uS	At250V
Amplification factor	20	At250V
Plate resistance	8000 ohm	At100V
Transconductance	2500 uS	At100V
Amplification factor	20	At100V