

ELECTRONIC TUBE REFERENCE

6193

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
TRIODE-TRIODE

Rugged long-life twin triode intended for reliable amplifier service in demanding equipment, with construction emphasizing dependable operation under adverse mechanical conditions.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8DG	BASE PINS	8
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

8DG - TERMINAL PINOUT

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

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	8500 Ω
TRANSCONDUCTANCE	0.0065 S
AMPLIFICATION FACTOR	55
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	15 mA
<i>One of two high-frequency triodes; identical-section compression applied.</i>	

SECTION2 Triode	
PLATE RESISTANCE	8500 Ω
TRANSCONDUCTANCE	0.0065 S
AMPLIFICATION FACTOR	55
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	15 mA
<i>Second physical triode restored.</i>	

Ruggedized subminiature twin triode for military mixer, amplifier, and multivibrator service; electrically related to the 7F8 with different dissipation limits.



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 · Triode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	6.3 V	Published nominal value
Heater or filament current	300 mA	Published nominal value
Equivalent reference	7F8	Source states equivalent except dissipation limits

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	2 W	Published maximum rating
Application	Mixer; amplifier; multivibrator	Military/rugged service



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	2.75 pF	—
Output capacitance	2.2 pF	—
Grid-to-plate capacitance	1.46 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	180 V	ClassA
Grid voltage	-1 V	ClassA
Plate current	11.5 mA	ClassA
Plate voltage	90 V	ClassA
Grid voltage	-0.5 V	ClassA
Plate current	4.5 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	8500 ohm	At180V
Transconductance	6500 uS	At180V
Amplification factor	55	At180V
Plate resistance	9000 ohm	At90V
Transconductance	5800 uS	At90V
Amplification factor	50	At90V

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