

ELECTRONIC TUBE REFERENCE

6189

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Special-quality medium-mu twin triode designed for reliable long-life operation in amplifier and control circuits, broadly associated with the industrial 12AU7 family.

GENERAL CHARACTERISTICS

BASE DESIGNATION	Noval	BASE PINS	9
NOMINAL HEATER	12.6 V / 150 mA	PARALLEL HEATER	6.3 V / 300 mA
HEATING	Indirect	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	7700 Ω
TRANSCONDUCTANCE	0.0031 S
AMPLIFICATION FACTOR	17
MAXIMUM PLATE VOLTAGE	320 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	22 mA
Representative row for electrically identical repeated sections.	

SECTION2 Triode	
PLATE RESISTANCE	7700 Ω
TRANSCONDUCTANCE	0.0031 S
AMPLIFICATION FACTOR	17
MAXIMUM PLATE VOLTAGE	320 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	22 mA
<i>Second physical triode restored.</i>	

High-reliability medium-mu dual triode for voltage amplification, phase splitting, and general-purpose amplifier service.



SOURCE OPERATING CONDITIONS

1955 Lorenz

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

1955 LORENZ

Section 1 · Triode

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Long-life construction	TRUE	—
Ruggedized construction	TRUE	—



SOURCE OPERATING CONDITIONS

1959 Telefunken

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

1959 TELEFUNKEN

Section 1 · Triode

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	300 mA	—
EquivalentDesignation	ECC802S	—



1960 RCA Industrial and Communications Types

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

1960 RCA INDUSTRIAL AND COMMUNICATIONS TYPES

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	12.6 V	—
Heater Current	150 mA	—



SOURCE DATA APPENDIX

1961 Tung Sol

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

1961 TUNG SOL

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA;EachSection
Service	Audio amplifier / phase inverter / oscillator / mixer	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	10.5 mA	ClassA;EachSection



SOURCE DATA APPENDIX

1966 Tung Sol Electronic Tubes 4 of 4

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1966 TUNG SOL ELECTRONIC TUBES 4 OF 4

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	12.6 V	—
Heater/filament current	150 mA	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application summary	Ruggedized medium-mu twin triode, co-designated 6189/12AU7WA.	

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	—
Plate current	10.5 mA	—
Plate resistance	7700 ohm	—
Transconductance	2200 uS	—
Amplification factor	17	—



SOURCE DATA APPENDIX

1968 Mazda Belvu

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

1968 MAZDA BELVU

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterCurrentNominal	300 mA	Nominal
Maximum Plate Voltage	330 V	—
Maximum Plate Dissipation	3 W	—
Maximum Cathode Current	22 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	2200 μ S	Typical
Amplification Factor	17	Typical
Plate Resistance	7700 ohm	Typical



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1999 Philips 0-D

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

1999 PHILIPS 0-D
Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode current	11.8 mA	Typical per section
Anode-grid capacitance	1.5 pF	Interelectrode
Grid-cathode-heater capacitance	1.6 pF	Interelectrode