ELECTRONIC TUBE REFERENCE

205F

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRIODE

Power-output triode intended for amplifier service, using a directly heated filament and operating conditions suited to appreciable audio-frequency output. The documentation places it in power rather than small-signal triode service.

General characteristics

BASE DESIGNATION	–	**BASE PINS**	4
NOMINAL HEATER	4.5 V / 1.6 A	**PARALLEL HEATER**	– / –
HEATING	Direct	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Triode

PLATE RESISTANCE	3700 Ω
TRANSCONDUCTANCE	0.00195 S
AMPLIFICATION FACTOR	7.2
MAXIMUM PLATE VOLTAGE	400 V
MAXIMUM PLATE DISSIPATION	12.5 W
MAXIMUM CATHODE CURRENT	50 mA

Promoted fields mapped from published ratings/characteristics; additional published values preserved in parameter table.

The Western Electric 205F is a triode listed in the supplied catalog table.

SOURCE OPERATING CONDITIONS

1956 Western Electric Tubes

SOURCE PDF

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

1956 WESTERN ELECTRIC TUBES

Section 1 · Triode

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Maximum Plate Voltage	**400 V**	Catalog-table value

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

2026 Western Electric 200s

SOURCE PDF

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

2026 WESTERN ELECTRIC 200S

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Filament Voltage	**4.5 Volt**	Filament Voltage 4.5 volts
Plate Current) Eb =	**350 volts**	Plate Current) Eb = 350 volts; 35 milliamperes
Power Output I Ec =	**-22.5 volts**	Power Output I Ec = —22.5 volts 880 milliwatts
ii voltage, A-C or D-C	**4.5 volt**	-...ii voltage, A-C or D-C . 4.5 volts
Filament Current	**1.6 amperes**	Filament Current .... 1.6 amperes
Output	**2.2 uuf**	Output 2.2 uuf
Plate Voltage	**360 Volt**	Plate Voltage 360 volts
Plate Current	**50 milliamperes**	Plate Current . 50 milliamperes
Plate Dissipation	**12.5 watts**	Plate Dissipation 12.5 watts
Filament Voltage, A-C	**4.5 Volt**	Filament Voltage, A-C .... 4.5 4.5 4 S 4.5 v o l t s
Plate Voltage	**250 Volt**	Plate Voltage 250 300 350 350 volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid Voltage*	**-2 Volt**	Grid Voltage* - 2 2 - 1 8 -22.5 - 2 2 . 5 volts
Zero Signal Plate Current	**11 milliamperes**	Zero Signal Plate Current 11 . 5 30 35 35 milliamperes
Plate Resistance	**5300 ohms**	Plate Resistance 5300 3800 3700 3700 ohms
Amplification Factor	**7.2**	Amplification Factor 7.2 7.2 7.2 7.2
Total Harmonic Distortion	**4.6**	Total Harmonic Distortion 4.6 1.6 2.8 1.4 p e r c e n t
if the grid voltage, measured from the negative filament, is decreased by	**23 volt**	if the grid voltage, measured from the negative filament, is decreased by 23 volts.

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Signal Plate Current	**12 milliamperes**	Maximum Signal Plate Current . 12 30.5 36 36 milliamperes
Maximum Signal Power Output	**550 watts**	Maximum Signal Power Output . 550 450 880 760 milliwatts