



ELECTRONIC TUBE REFERENCE

892R

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

High-power transmitting triode for RF amplification, oscillation, modulation, or related transmitter and industrial service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	22 V / 60 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
TRANSCONDUCTANCE	0.007 S
AMPLIFICATION FACTOR	50
MAXIMUM PLATE VOLTAGE	12500 V
MAXIMUM PLATE DISSIPATION	4000 W
MAXIMUM CATHODE CURRENT	3.3 A
<i>Promoted ratings/characteristics mapped from printed headings; device/service-specific values retained in parameters.</i>	

Forced-air-cooled high-power transmitting-triode version of the 892 family.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 General Electric Transmitting Types

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

1950 GENERAL ELECTRIC TRANSMITTING TYPES

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification Factor	50	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	15000 V	—
Maximum Plate Dissipation	10000 W	—
Maximum Cathode Current	3.3 A	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1953 Amperex

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

1953 AMPEREX

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/Filament Voltage	22 V	Published datasheet value
Heater/Filament Current	120 A	Published datasheet value
Maximum Plate/Anode Voltage	12500 V	Published datasheet value
Maximum Plate/Anode Dissipation	8000 W	Published datasheet value

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	7000 μ S	Published datasheet value
Amplification Factor	50	Published datasheet value



SOURCE OPERATING CONDITIONS

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1958 Amperex Industrial

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

1958 AMPEREX INDUSTRIAL

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	10000 V	RFPowerAmplifier;ClassC
Plate current	1.4 A	RFPowerAmplifier;ClassC
Power output	10500 W	RFPowerAmplifier;ClassC
Control-grid voltage	-1300 V	RFPowerAmplifier;ClassC
Grid current	160 mA	RFPowerAmplifier;ClassC
Maximum frequency at full input	1.6 MHz	RFPowerAmplifier

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	32 pF	Section1
Grid-to-filament capacitance	17 pF	Section1
Plate-to-filament capacitance	2 pF	Section1



1963 Amperex Condensed

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

1963 AMPEREX CONDENSED
Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	10000 V	RFPowerAmplifier
Plate current	1.4 A	RFPowerAmplifier
Power output	10500 W	RFPowerAmplifier
Control-grid voltage	-1300 V	RFPowerAmplifier
Grid current	160 mA	RFPowerAmplifier
Maximum frequency at full input	1.6 MHz	RFPowerAmplifier

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	32 pF	Section1
Grid-to-filament capacitance	17 pF	Section1
Plate-to-filament capacitance	2 pF	Section1



TUBE TINKER
ELECTRON TUBE DATABASE

SOURCE DATA APPENDIX

1971 Machlette Laboratories

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

1971 MACHLETTE LABORATORIES

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
designed specifically for use as modulators, amplifiers, or voltage and [1]	30 kW	designed specifically for use as modulators, amplifiers, or voltage and 30 kW plate input for the ML-892 and 125
designed specifically for use as modulators, amplifiers, or voltage and [2]	892 kW	designed specifically for use as modulators, amplifiers, or voltage and 30 kW plate input for the ML-892 and 125
designed specifically for use as modulators, amplifiers, or voltage and [3]	125 kW	designed specifically for use as modulators, amplifiers, or voltage and 30 kW plate input for the ML-892 and 125
oscillators in radio transmitting service. The cathode of kVdc plate voltage and [1]	18 kV	oscillators in radio transmitting service. The cathode of kVdc plate voltage and 18 kW plate input for the ML-892R
oscillators in radio transmitting service. The cathode of kVdc plate voltage and [2]	892 kV	oscillators in radio transmitting service. The cathode of kVdc plate voltage and 18 kW plate input for the ML-892R
water-cooled anode capable of dissipating [1]	10 kW	water-cooled anode capable of dissipating 10 kW with a service up to 20 Mc with plate voltage and plate input re-
water-cooled anode capable of dissipating [2]	20 kW	water-cooled anode capable of dissipating 10 kW with a service up to 20 Mc with plate voltage and plate input re-
anode capable of dissipating	4 kW	anode capable of dissipating 4 kW with an air flow of
Filament Voltage	22	Filament Voltage ... 22 Vol
Filament Current ccocooiiiiiii i	60 A	Filament Current ccocooiiiiiii i 60 Amps
Filament Starting Current, maximum	120 A	Filament Starting Current, maximum .. 120 Amps
Filament Cold Resistance ...t	0.031	Filament Cold Resistance ...t 0.031 Obms
Amplification Factor	50	Amplification Factor ... 50
Interelectrode Capacitances: ML [1]	892	Interelectrode Capacitances: ML-892 ML-892R

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Interelectrode Capacitances: ML [2]	892	Interelectrode Capacitances: ML-892 ML-892R
Water flow on anode [1]	3 gpm	Water flow on anode ... 3-8 gpm
Water flow on anode [2]	-8 gpm	Water flow on anode ... 3-8 gpm
Maximum outgoing water temperature	70 mA	Maximum outgoing water temperature ... 70 °C
Air flow on anode, minimum for [1]	4 kW	Air flow on anode, minimum for 4 kW dissipation 450 cfm at 0.5" Water
Air flow on anode, minimum for [2]	450 kW	Air flow on anode, minimum for 4 kW dissipation 450 cfm at 0.5" Water
Air flow on anode, minimum for [3]	0.5 kW	Air flow on anode, minimum for 4 kW dissipation 450 cfm at 0.5" Water
Maximum incoming air temperature ccccooeiin	45 mA	Maximum incoming air temperature ccccooeiin. 45 °C
Maximum Glass Temperature coocooiiiiii,	160 mA	Maximum Glass Temperature coocooiiiiii, ... 160 °C
D-C Plate Voltage [1]	15000	D-C Plate Voltage 15000 12500 voles modulation factor of 1.0
D-C Plate Voltage [2]	12500	D-C Plate Voltage 15000 12500 voles modulation factor of 1.0
D-C Plate Voltage [3]	1	D-C Plate Voltage 15000 12500 voles modulation factor of 1.0
Max-Signal D-C Plate Current* [1]	2 A	Max-Signal D-C Plate Current* ... 2.0 2.0 amps Maximum Ratings, Absolute Values ML-892 ML-892R
Max-Signal D-C Plate Current* [2]	2 A	Max-Signal D-C Plate Current* ... 2.0 2.0 amps Maximum Ratings, Absolute Values ML-892 ML-892R
Max-Signal D-C Plate Current* [3]	892 A	Max-Signal D-C Plate Current* ... 2.0 2.0 amps Maximum Ratings, Absolute Values ML-892 ML-892R
Max-Signal D-C Plate Current* [4]	892 A	Max-Signal D-C Plate Current* ... 2.0 2.0 amps Maximum Ratings, Absolute Values ML-892 ML-892R
Max-Signal Plate Input® [1]	20000 V	Max-Signal Plate Input® 20000 12000 wats D-C Plate Voltage 1000 1000 volts
Max-Signal Plate Input® [2]	12000 V	Max-Signal Plate Input® 20000 12000 wats D-C Plate Voltage 1000 1000 volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Max-Signal Plate Input® [3]	1000 V	Max-Signal Plate Input® 20000 12000 watts D-C Plate Voltage 1000 1000 volts
Max-Signal Plate Input® [4]	1000 V	Max-Signal Plate Input® 20000 12000 watts D-C Plate Voltage 1000 1000 volts
Plate Dissipation* [1]	7500 V	Plate Dissipation* ... 7500 4000 watts D-C Grid Voleage ... —3000 —3000 volts
Plate Dissipation* [2]	4000 V	Plate Dissipation* ... 7500 4000 watts D-C Grid Voleage ... —3000 —3000 volts
Plate Dissipation* [3]	-3000 V	Plate Dissipation* ... 7500 4000 watts D-C Grid Voleage ... —3000 —3000 volts
Plate Dissipation* [4]	-3000 V	Plate Dissipation* ... 7500 4000 watts D-C Grid Voleage ... —3000 —3000 volts
Typical Operation (Values are for two tubes) ML [1]	892 A	Typical Operation (Values are for two tubes) ML-892 D-C Plate Current 1.0 1.0 amps
Typical Operation (Values are for two tubes) ML [2]	1 A	Typical Operation (Values are for two tubes) ML-892 D-C Plate Current 1.0 1.0 amps
Typical Operation (Values are for two tubes) ML [3]	1 A	Typical Operation (Values are for two tubes) ML-892 D-C Plate Current 1.0 1.0 amps
D-C Plate Voltage [1]	6000 V	D-C Plate Voltage ... 6000 8000 10000 12500 volts D-C Grid Current 030 030 amp
D-C Plate Voltage [2]	8000 V	D-C Plate Voltage ... 6000 8000 10000 12500 volts D-C Grid Current 030 030 amp
D-C Plate Voltage [3]	10000 V	D-C Plate Voltage ... 6000 8000 10000 12500 volts D-C Grid Current 030 030 amp
D-C Plate Voltage [4]	12500 V	D-C Plate Voltage ... 6000 8000 10000 12500 volts D-C Grid Current 030 030 amp
D-C Plate Voltage [5]	30 V	D-C Plate Voltage ... 6000 8000 10000 12500 volts D-C Grid Current 030 030 amp
D-C Plate Voltage [6]	30 V	D-C Plate Voltage ... 6000 8000 10000 12500 volts D-C Grid Current 030 030 amp
Voltage [1]	1000 V	Voltage ... 1000 1000 1380 1370 volts Typical Operation ML-892
Voltage [2]	1000 V	Voltage ... 1000 1000 1380 1370 volts Typical Operation ML-892
Voltage [3]	1380 V	Voltage ... 1000 1000 1380 1370 volts Typical Operation ML-892
Voltage [4]	1370 V	Voltage ... 1000 1000 1380 1370 volts Typical Operation ML-892
Voltage [5]	892 V	Voltage ... 1000 1000 1380 1370 volts Typical Operation ML-892

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Zero-Signal D-C Plate D-C Plate Voltage [1]	6000 V	Zero-Signal D-C Plate D-C Plate Voltage 6000 8000 10000 volts
Zero-Signal D-C Plate D-C Plate Voltage [2]	8000 V	Zero-Signal D-C Plate D-C Plate Voltage 6000 8000 10000 volts
Zero-Signal D-C Plate D-C Plate Voltage [3]	10000 V	Zero-Signal D-C Plate D-C Plate Voltage 6000 8000 10000 volts
Current [1]	5 V	Current ... 05 05 0.5 0.4 amp D-C Grid Voltage —1000 —1300 —1600 volts
Current [2]	5 V	Current ... 05 05 0.5 0.4 amp D-C Grid Voltage —1000 —1300 —1600 volts
Current [3]	0.5 V	Current ... 05 05 0.5 0.4 amp D-C Grid Voltage —1000 —1300 —1600 volts
Current [4]	0.4 V	Current ... 05 05 0.5 0.4 amp D-C Grid Voltage —1000 —1300 —1600 volts
Current [5]	-1000 V	Current ... 05 05 0.5 0.4 amp D-C Grid Voltage —1000 —1300 —1600 volts
Current [6]	-1300 V	Current ... 05 05 0.5 0.4 amp D-C Grid Voltage —1000 —1300 —1600 volts
Current [7]	-1600 V	Current ... 05 05 0.5 0.4 amp D-C Grid Voltage —1000 —1300 —1600 volts
Max.-Signal D-C Plate Peak R-F Grid Voltage [1]	1650 V	Max.-Signal D-C Plate Peak R-F Grid Voltage 1650 1950 2250 wvolts
Max.-Signal D-C Plate Peak R-F Grid Voltage [2]	1950 V	Max.-Signal D-C Plate Peak R-F Grid Voltage 1650 1950 2250 wvolts
Max.-Signal D-C Plate Peak R-F Grid Voltage [3]	2250 V	Max.-Signal D-C Plate Peak R-F Grid Voltage 1650 1950 2250 wvolts
Cu_ffenf ----- e [1]	26 A	Cu_ffenf ----- e 26 2.3 3.3 2.8 amps D-C Plate Current 0.83 0.82 0.78 amp
Cu_ffenf ----- e [2]	2.3 A	Cu_ffenf ----- e 26 2.3 3.3 2.8 amps D-C Plate Current 0.83 0.82 0.78 amp
Cu_ffenf ----- e [3]	3.3 A	Cu_ffenf ----- e 26 2.3 3.3 2.8 amps D-C Plate Current 0.83 0.82 0.78 amp
Cu_ffenf ----- e [4]	2.8 A	Cu_ffenf ----- e 26 2.3 3.3 2.8 amps D-C Plate Current 0.83 0.82 0.78 amp
Cu_ffenf ----- e [5]	830 mA	Cu_ffenf ----- e 26 2.3 3.3 2.8 amps D-C Plate Current 0.83 0.82 0.78 amp
Cu_ffenf ----- e [6]	820 mA	Cu_ffenf ----- e 26 2.3 3.3 2.8 amps D-C Plate Current 0.83 0.82 0.78 amp
Cu_ffenf ----- e [7]	780 mA	Cu_ffenf ----- e 26 2.3 3.3 2.8 amps D-C Plate Current 0.83 0.82 0.78 amp