



ELECTRONIC TUBE REFERENCE

WX12

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Raytheon directly heated low-voltage triode for detector or amplifier service in battery-operated equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	1.1 V / 250 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	15000 Ω
TRANSCONDUCTANCE	0.00044 S
AMPLIFICATION FACTOR	6.6
MAXIMUM PLATE VOLTAGE	135 V
Published ratings and characteristics promoted where clearly applicable; additional published values retained as section parameters.	

WX12 is a Raytheon directly heated triode intended for detector or amplifier service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1937 Raytheon Radio Receiving Tubes

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

1937 RAYTHEON RADIO RECEIVING TUBES

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage	1.1 V	Published filament rating
Filament current	250 mA	Published filament rating
Plate resistance	15000 ohm	ClassA
Transconductance	440 μS	ClassA
Amplification factor	6.6	ClassA

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	135 V	Published datasheet rating
Plate voltage	135 V	ClassA
Control-grid bias	10.5 V	ClassA
Plate current	3 mA	ClassA
Biased-detector plate voltage	80 V	BiasedDetector
Biased-detector grid bias	10.5 V	BiasedDetector
Biased-detector no-signal plate current	0.2 mA	BiasedDetector
Grid-leak detector plate voltage	45 V	GridLeakDetector
Grid-leak resistance minimum	0.25 MOhm	GridLeakDetector
Grid-leak resistance maximum	5 MOhm	GridLeakDetector
Grid condenser	0.00025 uF	GridLeakDetector

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	2.5 pF	Published capacitance
Output capacitance	2.5 pF	Published capacitance
Grid-to-plate capacitance	3.3 pF	Published capacitance



SOURCE DATA APPENDIX

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	1.1 V	Published nominal value
Heater or filament current	250 mA	Published nominal value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Detector plate voltage	20 V	Normal detector operation
Amplifier plate voltage	112.5 V	Published amplifier example
Maximum plate voltage	135 V	Published

TUBE TINKER

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