



ELECTRONIC TUBE REFERENCE

3AZP31

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

CATHODERAY-CATHODERAY

ETEL 3AZP31 dual-gun electrostatic-focus and electrostatic-deflection oscilloscope CRT with flat green P31 screen, B12F base and 6.3 V 1.25 A parallel-only heater.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B12F	BASE PINS	12
NOMINAL HEATER	6.3 V / 1.25 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	1800 V
MAXIMUM SCREEN VOLTAGE	600 V
MAXIMUM PLATE DISSIPATION	2 W
<i>Gun 1 (primed electrode set). ETEL 3AZP31: max combined anodes1+3 1800 V, min 1000 V; anode2 focusing max 600 V; grid negative max magnitude 200 V, peak heater-cathode max 250 V, deflection plate-to-anodes1+3 max 300 V, anode dissipation max 2 W. Typical anodes1+3 1500 V, anode2 330-470 V, grid cutoff -42 to -95 V, anode2 current max 125 μA; X 23 V/cm, Y 16 V/cm. Gun1 capacitances: grid-to-all 5.2-7.4 pF, cathode-to-all 3.0-4.6 pF, X1-to-all (X2 earthed) 4.5-6.5 pF, X2-to-all (X1 earthed) 4.6-7.2 pF, Y1-to-all (Y2 earthed) 2.0-4.0 pF, Y2-to-all (Y1 earthed) 2.8-4.4 pF, X1-X2 max 1.7 pF, Y1-Y2 1.5-2.5 pF. Combined screen power limit both guns 3 mW/cm².</i>	

SECTION2 Cathode Ray	
MAXIMUM PLATE VOLTAGE	1800 V
MAXIMUM SCREEN VOLTAGE	600 V
MAXIMUM PLATE DISSIPATION	2 W
<i>Gun 2 (double-primed electrode set). ETEL 3AZP31: max combined anodes1+3 1800 V, min 1000 V; anode2 focusing max 600 V; grid negative max magnitude 200 V, peak heater-cathode max 250 V, deflection plate-to-anodes1+3 max 300 V, anode dissipation max 2 W. Typical anodes1+3 1500 V, anode2 330-470 V, grid cutoff -42 to -95 V, anode2 current max 125 μA; X 23 V/cm, Y 16 V/cm. Gun2 capacitances: grid-to-all 5.0-7.2 pF, cathode-to-all 3.0-4.6 pF, X1-to-all (X2 earthed) 4.5-6.5 pF, X2-to-all (X1 earthed) 4.6-7.2 pF, Y1-to-all (Y2 earthed) 2.8-4.4 pF, Y2-to-all (Y1 earthed) 2.0-4.0 pF, X1-X2 max 1.7 pF, Y1-Y2 1.5-2.5 pF. Combined screen power limit both guns 3 mW/cm².</i>	

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker