



ELECTRONIC TUBE REFERENCE

30PL13

Power - TV Vertical Output electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

BEAMPOWER-TRIODE

Beam-power television output valve intended primarily for frame or vertical-deflection amplification, with high pulse-current capability for scanning service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B9A	BASE PINS	9
NOMINAL HEATER	16 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION 1 Beam Power	
TRANSCONDUCTANCE	0.0075 S
AMPLIFICATION FACTOR	8.3
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	7 W
MAXIMUM SCREEN DISSIPATION	2.4 W
MAXIMUM CATHODE CURRENT	75 mA
Output beam-tetrode section.	

SECTION2 Triode	
TRANSCONDUCTANCE	0.0034 S
AMPLIFICATION FACTOR	18
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	1 W
<i>Triode section.</i>	

Triode output beam-tetrode for television field-deflection circuits using 110-degree cathode-ray tubes. The supplied English-language Mazda/Thorn-AEI datasheet was used for the technical and descriptive extraction.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1960 Mazda

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

1960 MAZDA

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumPositivePeakAnodeVoltage	2000 V	BeamPower;Pulse
MaximumNegativePeakAnodeVoltage	500 V	BeamPower;Pulse
TypicalFrameAnodeVoltage	55 V	BeamPower;FrameTimeBase
TypicalFrameScreenVoltage	170 V	BeamPower;FrameTimeBase
TypicalPeakAnodeCurrent	175 mA	BeamPower;AverageNewValve

1960 MAZDA

Section 2 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Anode Voltage	200 V	Triode
TypicalAnodeCurrent	10 mA	Triode



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1973 Mazda Valves Binder 2

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

1973 MAZDA VALVES BINDER 2

Section 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current Ih	300 mA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage Vh	16 V	—
Maximum Anode Dissipation pa(max) 1	7 W	—
Maximum Screen Dissipation P52(max)	24 W	—
Maximum Anode Voltage Va(max) 250	250 V	—
Maximum Screen Grid Voltage Vg z(max)	250 V	—
Maximum Mean Cathode Current Ik(av)max —	75 mA	—
Maximum pulse duration 4% of one cycle with a maximum of	800 μs	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid 1 to Earth c81.E 100 104	115 pF	—
Anode Tetrode to Earth caq.E 95 103	114 pF	—
Grid 1 to Anode Tetrode cgi .aq 036 036	0.37 pF	—
Grid Triode to Earth cgt-E 21 24	33 pF	—
Anode Triode to Earth cat-E 19 23	33 pF	—
Grid Triode to Anode Triode cgt-at 23 23	24 pF	—
Grid 1 to Anode Triode cg1- at 0 007 0 014 0	19 pF	—
Grid Triode to Anode Tetrode cgt-aq 0 017 0 022 0	24 pF	—
Anode Tetrode to Anode Triode caq-at 0075 0 085 0	95 pF	—
Anode Voltage Va 100	170 V	—
Screen Grid Voltage Vg2 —	170 V	—
Anode Current Ia 10	45 mA	—
Screen Current Ig _ —	87 mA	—
j.____wn .____._	10 a	—