



ELECTRONIC TUBE REFERENCE

6FD12

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

DIODE-DIODE-PENTODE

Double-diode pentode combining detector and control-voltage rectification with high-resistance signal amplification. The pentode provides substantial gain while paired diodes support detector and AVC-related functions.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Diode	
MAXIMUM CATHODE CURRENT	0.8 mA
PEAK INVERSE VOLTAGE	200 V
NOMINAL OUTPUT CURRENT	0.8 mA
PEAK FORWARD CURRENT	5 mA
<i>Published electrical limits and characteristics promoted from the approved source.</i>	

SECTION2 Diode	
MAXIMUM CATHODE CURRENT	0.8 mA
PEAK INVERSE VOLTAGE	200 V
NOMINAL OUTPUT CURRENT	0.8 mA
PEAK FORWARD CURRENT	5 mA
<i>Published electrical limits and characteristics promoted from the approved source.</i>	

SECTION3 Pentode	
PLATE RESISTANCE	1010000 Ω
TRANSCONDUCTANCE	0.00381 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	2.25 W
MAXIMUM SCREEN DISSIPATION	0.45 W
MAXIMUM CATHODE CURRENT	16.5 mA
<i>Published electrical limits and characteristics promoted from the approved source.</i>	

Double-diode variable-mu RF pentode for RF or IF amplification and detector service.

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 1 · Diode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	300 mA	Nominal
Maximum Cathode Current	0.8 mA	—
Maximum Peak Inverse Voltage	200 V	—
Rectified Output Current	0.8 mA	—
PeakForwardCurrent	5 mA	—

1973 MAZDA VALVES BINDER 2

Section 2 · Diode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	300 mA	Nominal
Maximum Cathode Current	0.8 mA	—
Maximum Peak Inverse Voltage	200 V	—
Rectified Output Current	0.8 mA	—
PeakForwardCurrent	5 mA	—

1973 MAZDA VALVES BINDER 2

Section 3 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	300 mA	Nominal

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	300 V	—
Maximum Screen Voltage	300 V	—
Maximum Plate Dissipation	2.25 W	—
Maximum Screen Dissipation	0.45 W	—
Maximum Cathode Current	16.5 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	3810 μ S	Typical
Amplification Factor	20	Typical
Plate Resistance	1010000 ohm	Typical

TUBE TINKER

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

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