



ELECTRONIC TUBE REFERENCE

1FD9

Voltage Pentode or Tetrode (with diode) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

DIODE-PENTODE

Battery diode-pentode combining signal detection with subsequent voltage amplification. The diode supplies detector action while the pentode operates from low-voltage receiver supplies with an economical directly heated filament.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	1.4 V / 50 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Diode	
MAXIMUM CATHODE CURRENT	0.2 mA
<i>Mazda 1FD9 directly heated diode and RF pentode for portable battery receiving equipment, filament 1.4 V, 50 mA. This diode section has maximum mean diode current 200 μA (0.2 mA), distinct from the pentode/overall maximum cathode current of 3 mA. The published 90 V anode and 90 V screen maxima belong to the pentode, not this diode. Seven-pin B7G base, physical diode plate at pin 3; interelectrode capacitances published.</i>	

SECTION2 Pentode	
PLATE RESISTANCE	600000 Ω
TRANSCONDUCTANCE	0.000625 S
MAXIMUM PLATE VOLTAGE	90 V
MAXIMUM SCREEN VOLTAGE	90 V
MAXIMUM CATHODE CURRENT	3 mA
Mazda 1FD9 directly heated RF pentode section combined with a distinct detector diode, filament 1.4 V 50 mA. Manufacturer maxima pentode plate voltage 90 V, screen voltage 90 V, total cathode current 3 mA; diode current limited separately to 200 μ A. Typical at anode 67.5 V, screen 67.5 V, grid bias 0: plate current 1.6 mA, screen current 0.4 mA, transconductance 0.625 mA/V (0.000625 S), approximate anode resistance 0.6 M Ω . Published interelectrode capacitances. Seven-pin B7G base.	

Combined diode and R.F. pentode, directly heated for battery operation.

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 · Diode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pentode mutual conductance	0.625 mA/V	Typical operation