



ELECTRONIC TUBE REFERENCE

6DC8

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

DIODE-DIODE-PENTODE

Double-diode remote-cutoff pentode combining detection and AVC rectification with gain-controlled IF amplification. The variable-mu pentode permits smooth receiver gain control while paired diodes handle detector 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	Common cathode	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	900000 Ω
TRANSCONDUCTANCE	0.0045 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
Pentode section; representative characteristic point uses 250 V plate and 100 V screen.	

SECTION2 Diode	
PEAK INVERSE VOLTAGE	200 V
PEAK FORWARD CURRENT	5 mA
<i>Detector diode I.</i>	

SECTION3 Diode	
PEAK FORWARD CURRENT	5 mA
<i>Detector diode II.</i>	

Dual-diode pentode for detection and RF or IF amplification; source also designates 6DC8.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1959 Rogers

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

1959 ROGERS

Section 1 · Pentode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cutoff characteristic	Remote cutoff	—

APPLICATION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	RF / IF amplifier	—



SOURCE OPERATING CONDITIONS

195X Tesla

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

195X TESLA

Section 1 · Pentode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Interelectrode capacitances	Published	See source sheet for electrode-specific capacitance values

195X TESLA

Section 2 · Diode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Interelectrode capacitances	Published	See source sheet for electrode-specific capacitance values

Section 3 · Diode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Interelectrode capacitances	Published	See source sheet for electrode-specific capacitance values



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1963 Amperex Condensed

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

1963 AMPEREX CONDENSED

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	IFAmplifier
Screen voltage	100 V	IFAmplifier
Control-grid bias	-2 V	IFAmplifier
Plate current	9 mA	IFAmplifier
Screen current	2.7 mA	IFAmplifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	20	IFAmplifier
Plate resistance	1000000 ohm	IFAmplifier

1963 AMPEREX CONDENSED

Section 2 · Diode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published heater rating
Heater current	300 mA	Published heater rating



SOURCE OPERATING CONDITIONS

1968 Mazda Belvu

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

1968 MAZDA BELVU

Section 1 · Pentode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	RF_IF_Amplifier text	—

1968 MAZDA BELVU

Section 2 · Diode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Detector text	—

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