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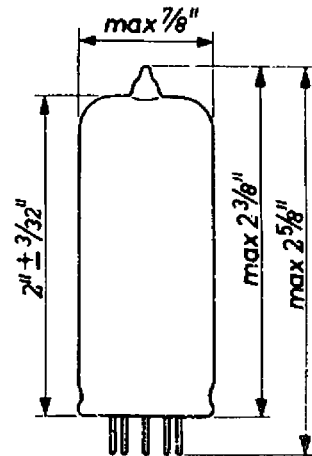
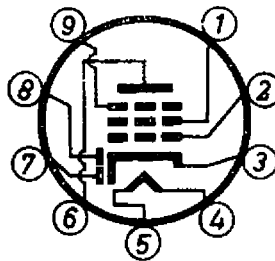
6 AD 8

DOUBLE DIODE-PENTODE for R.F., I.F. and A.F. amplification

Physical Specifications

Cathode	Coated unipotential
Base	Small button noval 9-pin
Bulb	T6 $\frac{1}{2}$
Maximum overall length	max. 2 $\frac{5}{8}$ "
Maximum seated height	max. 2 $\frac{3}{8}$ "
Bulb length excluding tip	2" \pm $\frac{3}{32}$ "
Maximum diameter	max. $\frac{7}{8}$ "
Mounting position	any
Basing connections - JETEC basing designation	9T-0-0

- Pin 1 - Grid No.2
- Pin 2 - Grid No.1
- Pin 3 - Cathode and internal shield
- Pin 4 - Heater
- Pin 5 - Heater
- Pin 6 - Pentode plate
- Pin 7 - Diode No.1 plate
- Pin 8 - Diode No.2 plate
- Pin 9 - Grid No.3



General Electrical Data

Heater voltage	6.3 volts
Heater current	0.3 amp

Direct Interelectrode Capacitances

Grid No.1 to all other elements	4.0 μ F
Pentode plate to all other elements	4.6 μ F
Pentode plate to grid No.1	max. 0.002 μ F
Grid No.1 to heater	max. 0.06 μ F
Diode No.1 plate to cathode	2.15 μ F

Direct Interelectrode Capacitances (continued)

Diode No.2 plate to cathode	2.35 $\mu\mu\text{F}$
Diode No.1 plate to diode No.2 plate	max. 0.3 $\mu\mu\text{F}$
Diode No.1 plate to heater	max. 0.02 $\mu\mu\text{F}$
Diode No.2 plate to heater	max. 0.01 $\mu\mu\text{F}$
Diode No.1 plate to grid No.1	max. 0.0008 $\mu\mu\text{F}$
Diode No.2 plate to grid No.1	max. 0.001 $\mu\mu\text{F}$
Diode No.1 plate to pentode plate	max. 0.2 $\mu\mu\text{F}$
Diode No.2 plate to pentode plate	max. 0.1 $\mu\mu\text{F}$

Maximum Ratings (Pentode section)(Design center values)

Plate voltage (without current)	max. 550 volts
Plate voltage	max. 250 volts
Plate dissipation	max. 2 watts
Grid No.2 voltage (without current)	max. 550 volts
Grid No.2 voltage (plate current less than 2.5 ma)	max. 250 volts
Grid No.2 voltage (plate current = 5 ma)	max. 125 volts
Grid No.2 dissipation	max. 0.3 watt
Cathode current	max. 9 ma
Grid current starting point. Grid No.1 voltage at grid No.1 current = + 0.3 μamp	max. -1.3 volts
Grid No.1 circuit resistance (see note 1)	max. 3 megohms
External resistance between heater and cathode	max. 20,000 ohms
Voltage between heater and cathode	max. 50 volts

Maximum Ratings (Diode section)(Design center values)

Plate voltage (peak value)	max. 200 volts
Plate current	max. 0.8 ma
Diode current starting point. Plate voltage at plate current = + 0.3 μamp	max. -1.3 volts
External resistance between heater and cathode	max. 20,000 ohms
Voltage between heater and cathode	max. 50 volts

Operating characteristics of the pentode section as
R.F. or I.F. amplifier

Plate and supply voltage	250 volts
Grid No.3 voltage	0 volt
Cathode resistor	225 ohms
Grid No.1 voltage	-2 volts
Grid No.2 voltage	85 volts
Plate current	6.7 ma
Grid No.2 current	2.3 ma
Transconductance	1100 micromhos
Plate resistance	1.0 megohm
Amplification factor of grid No.2 with respect to grid No.1	8.8
Grid No.1 bias for cut off (transconductance = 10 micromhos)	-15 volts

Note 1 - The maximum value of this resistor is 22 megohms if the grid bias is only obtained by the voltage drop across the grid resistor.

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