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TUBE TYPE 45A5

The 45A5 is a power amplifier pentode.

PHYSICAL SPECIFICATIONS

Cathode	Coated unipotential
Base	E8-30
Bulb	Glass
Maximum overall length	2-31/32" {76mm}
Maximum seated height	2-23/32" {69mm}
Maximum diameter	7/8" {22mm}
Mounting position	Any

BASING CONNECTIONS 8GW

Pin 1	Heater	Pin 5	Grid No. 2
Pin 2	Plate	Pin 6	Grid No. 1
Pin 3	Internal connection	Pin 7	Cathode, Grid No. 3
Pin 4	Internal connection	Pin 8	Heater

GENERAL ELECTRICAL DATA

Heater Voltage	45	volts
Heater Current	0.1	amps

ELECTRODE CAPACITANCES

Plate to Grid No. 1	<1.0	μF
Input	11.0	μF
Output	8.3	μF

MAXIMUM RATINGS (Design Centre Values)

Plate supply voltage	550	volts
Plate voltage	250	volts
Plate dissipation	9	watts
Grid No.2 supply voltage	550	volts
Grid No.2 voltage	250	volts
Grid No.2 dissipation (zero signal)	1.75	watts
Grid No.2 dissipation (max. signal)	4.0	watts
Cathode current	75	ma
Grid No. 1 circuit resistance	1	megohms
Voltage between heater and cathode	150	volts
External resistance between heater and cathode	20,000	ohms.

CHARACTERISTICS

Plate voltage	200	volts
Grid No.2 voltage	200	volts
Plate current	45	ma
Grid No.2 current	8.5	ma
Grid No.1 voltage	-14.2	volts
Transconductance	8,200	μmhos
Plate resistance	24,000	ohms
Amplification factor of Grid No.2 with respect to Grid No.1	10	

TYPICAL OPERATING CONDITIONS

Plate voltage	200	volts
Grid No.2 voltage	200	volts
Grid No.1 voltage	-14.2	volts
Plate current	45	ma
Grid No.2 current	8.5	ma
Peak A.F. Grid voltage	8.8	volts
Load Resistance	4,300	ohms
Max. Power Output	4.2	watts
Total Harmonic Distortion	10	%



