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TUBE TYPE 6CK5

The 6CK5 is a power amplifier pentode

PHYSICAL SPECIFICATIONS

Cathode	Coated unipotential
Base	E8-30
Bulb	Glass
Maximum overall length	2-31/32" { 76mm }
Maximum seat 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	6.3	volts
Heater Current	0.7	amps

ELECTRODE CAPACITANCES

Plate to Grid No.1	<1.0	μF
Grid No.1 to heater	<0.15	μF
Input	10.2	μF
Output	7.8	μF

MAXIMUM RATINGS (Design Centre Values)

Plate supply voltage	550	volts
Plate voltage	300	volts
Plate dissipation	9	watts
Grid No.2 supply voltage	550	volts
Grid No.2 voltage	300	volts
Grid No.2 dissipation (zero signal)	1.4	watts
Grid No.2 dissipation (Max. signal)	3.3	watts
Cathode current	55	ma
Grid No.1 circuit resistance	1	megohms
Voltage between heater and cathode	50	volts
External resistance between heater and cathode	20,000	ohms

CHARACTERISTICS

Plate voltage	250	volts
Grid No.2 voltage	250	volts
Plate current	36	ma
Grid No.2 current	5.2	ma
Grid No.1 voltage	-7.0	volts
Transconductance	10,000	μmhos
Plate resistance	40,000	ohms
Amplification factor of Grid No.2 with respect to Grid No.1	22	

TYPICAL OPERATING CONDITIONS

Plate voltage	250	volts
Grid No.2 voltage	250	volts
Grid No.1 voltage	-7	volts
Cathode resistor	170	ohms
Plate current	36	ma
Grid No.2 current	5.2	ma
Peak A.F. Grid voltage	5.6	volts
Load Resistance	7000	ohms
Max. Power Output	4.2	watts
Total Harmonic Distortion	10.0	%

Plate current (milliamps)

