

6BK8

MINIATURE A.F. PENTODE

A low noise pentode for use in the early stages of high gain audio amplifiers.

RATINGS

Filament voltage	:	6.3 V	
Filament current	:	0.2 A	
Peak-heater-cathode voltage	:	150 Max V	
Anode voltage	:	300 Max V	
Grid No. 2 voltage	:	200 Max V	
Cathode current	:	6 Max mA	
Plate resistance at (plate volts = 250 V)			= 2 megohms
(screen volts = 140 V)			
Transconductance: (plate current = 3 mA)			= 1850 umhos

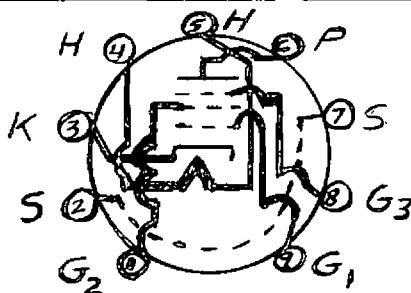
CAPACITANCES: (Of Cold Externally Unscreened Valve)

Grid No. 1 to plate	=	.025 uuf
Grid No. 1 to heater	=	.0025 uuf
Input	=	4.0 uuf
Output	=	5.5 uuf

TYPICAL OPERATION

Anode volts	175	175	volts
Voltage gain	180	110	
Cathode current	0.6	1.2	mA
Cathode resistor	2.2	1	K ohms
Grid resistor	1	0.47	megohms
Plate resistor	0.220	0.1	megohms

BASE CONNECTIONS AND TUBE DIMENSIONS



View From Underside
of Base

Base Connections - 9BJ

Pin 1	- #2 Grid
Pin 2	- Internal Screen
Pin 3	- Cathode
Pin 4	- Heater
Pin 5	- Heater
Pin 6	- Plate
Pin 7	- Internal Screen
Pin 8	- #3 Grid
Pin 9	- #1 Grid

Base:	E9-1
Bulb:	T6 $\frac{1}{2}$
Maximum Overall Length:	2 $\frac{3}{16}$ "
Maximum Seated Height:	1 $\frac{15}{16}$ "
Maximum Diameter:	$\frac{7}{8}$ "

HUM - When used under the above conditions with the control grid returned to earth via a 470K resistor, the total hum voltage referred to the grid will not exceed 1.5uV. If A.C. heating is used the heater winding should be provided with a center-tap. A variable hum balancing resistor is not required.

MOUNTING - Any position.

RETAINING - The use of a retaining device is recommended.

SCREENING - The tube is internally screened. A separate screening canister may be used when the application demands.

MICROPHONY - The standard of microphony permits the use of the tube in the first stage of a high gain amplifier following a low level microphone or tape reproducer.