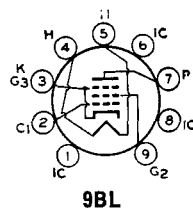


7060	Refer to chart at end of section.
7061	Refer to chart at end of section.
7167	Refer to chart at end of section.

7189**POWER PENTODE**

Miniature type used as power amplifier tube in high-fidelity audio equipment. Outlines section, 6G; requires miniature 9-contact socket.



Heater Voltage	6.3	volts
Heater Current	0.76	ampere
Peak Heater-Cathode Voltage	±100 max	volts
Direct Interelectrode Capacitances (Approx.):		
Grid No.1 to Plate	0.5	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	10.8	pF
Plate to Cathode, Heater, Grid-No.2, and Grid No.3	6.5	pF
Grid No.1 to Heater	0.25	pF

Class A₁ Amplifier**CHARACTERISTICS**

Plate Voltage	250	volts
Grid-No.2 (Screen-Grid) Voltage	250	volts
Grid-No.1 (Control-Grid) Voltage	—7.3	volts
Mu-Factor, Grid No.2 to Grid No.1	19.5	
Plate Resistance (Approx.)	40000	ohms
Transconductance	11300	μmhos
Plate Current	48	mA
Grid-No.2 Current	5.5	mA

Push-Pull Class AB₁ Amplifier**MAXIMUM RATINGS (Design-Center Values)**

		Grid-No.2 Special Connection*	
Plate Voltage	400	375	volts
Grid-No.2 Voltage	300	•	volts
Cathode Current	65	65	mA
Plate Dissipation	12	12	watts
Zero-Signal Grid-No.2 Input	2	2	watts
Maximum-Signal Grid-No.2 Input	4	4	watts

TYPICAL OPERATION (Values are for two tubes)

Plate Supply Voltage	—	375	volts
Plate Voltage	400	—	volts
Grid-No.2 Supply Voltage	—	•	
Grid-No.2 Voltage	300	•	volts
Grid-No.1 Voltage	—15	—	volts
Cathode-Bias Resistor	—	220	ohms
Peak AF Grid-No.1 Voltage	14.8	17.7	volts
Zero-Signal Plate Current	15	70	mA
Maximum-Signal Plate Current	105	81	mA
Zero-Signal Grid-No.2 Current	1.6	•	mA
Maximum-Signal Grid-No.2 Current	25	•	mA
Effective Load Resistance (Plate-to-plate)	8000	11000	ohms
Total Harmonic Distortion	4	3	per cent
Maximum-Signal Power Output	24	16.5	watts

MAXIMUM CIRCUIT VALUES

	Fixed Bias	Cathode Bias	
Grid-No.1-Circuit Resistance	0.3	1	megohm

* Grid No.2 of each tube connected to tap on plate winding of output transformer.

• Obtained from taps on primary winding of the output transformer. The taps are located on each side of the center tap (B+) so as to supply 43 per cent of the plate signal voltage to grid No.2 of each output tube.