



POWER AMPLIFIER PENTODE

6928
6AQ5L

For medium power applications where very long life and low failure rate is desired. Designed especially for dependable service.

COLD CAPACITANCES (external shield connected to cathode)

	MIN	AVE	MAX	
Grid No 1 to Plate		.35	.5	$\mu\mu\text{F}$
Input	6.4	8.0	9.6	$\mu\mu\text{F}$
Output	8.8	11.0	13.2	$\mu\mu\text{F}$

COLD CAPACITANCES (without external shield)

Grid No 1 to Plate	.6	$\mu\mu\text{F}$
Input	7.6	$\mu\mu\text{F}$
Output	6.0	$\mu\mu\text{F}$

ABSOLUTE MAXIMUM RATINGS

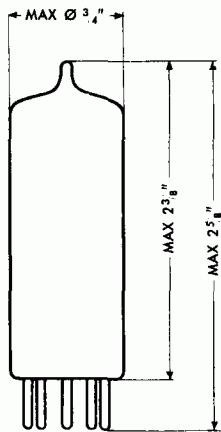
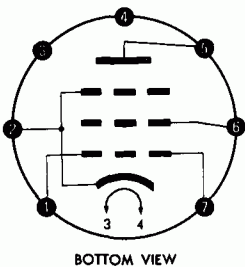
Plate Voltage	220	volts
Grid No 2 Voltage	220	volts
Grid No 1 Voltage, positive value	+ 10	volts
Grid No 1 Voltage, negative value	— 55	volts
Cathode Current	55	ma
Plate Dissipation	9	watts
Grid No 2 Dissipation (see Section A)	1.1	watt
Heater — Cathode Voltage	100	volts
Bulb Temperature, at hottest point	220	°C
Grid No 1 Circuit Resistance		
with fixed bias	.1	Mohm
with cathode bias	.5	Mohm

MECHANICAL DATA

Base: Small Button Miniature 7-pin,
RETMA E7-1
Bulb: EIA T 5½
Mounting Position: Any

PIN NO. CONNECTED TO

- 1. Grid No 1
- 2. Cathode, Grid No 3
- 3. Heater
- 4. Heater
- 5. Plate
- 6. Grid No 2
- 7. Grid No 1



6928

6AQ5L

POWER AMPLIFIER PENTODE



TYPICAL OPERATION. CLASS A₁

Heater Voltage	6.3	6.3	volts
Heater Current	.36	.36	amp
Plate Supply Voltage	130	180	volts
Grid No 2 Supply Voltage	130	180	volts
Cathode Bias Resistor	200	220	ohms
Plate Current	23	32.5	ma
Grid No 2 Current	2	3	ma
Transconductance	3400	3900	μ mhos
Plate Resistance	.08	.08	Mohm
Load Resistance	6000	8000	ohms
Power Output	1.0	2.1	watts
Total Harmonic Distortion	7	8	%
Amplification Factor Grid No 2 to 1	10	10	

OPERATION RANGE VALUES

Heater Voltage		6.3		volts
Plate Supply Voltage		130		volts
Grid No 2 Supply Voltage		130		volts
Cathode Bias Resistor		200		ohms
	MIN	AVE	MAX	
Heater Current	320	360	400	ma
Plate Current	16	23	30	ma
Grid No 2 Current			5.5	ma
Transconductance	2600	3400	4200	μ mhos
Transconductance, End of Life Point	2200			μ mhos
I_{hk} at $E_{hk} = \pm 100$ volts			50	μ a
Grid No 1 Current			-.1	μ a
Cutoff Plate Current at $E_{c1} = -40$ volts			200	μ a

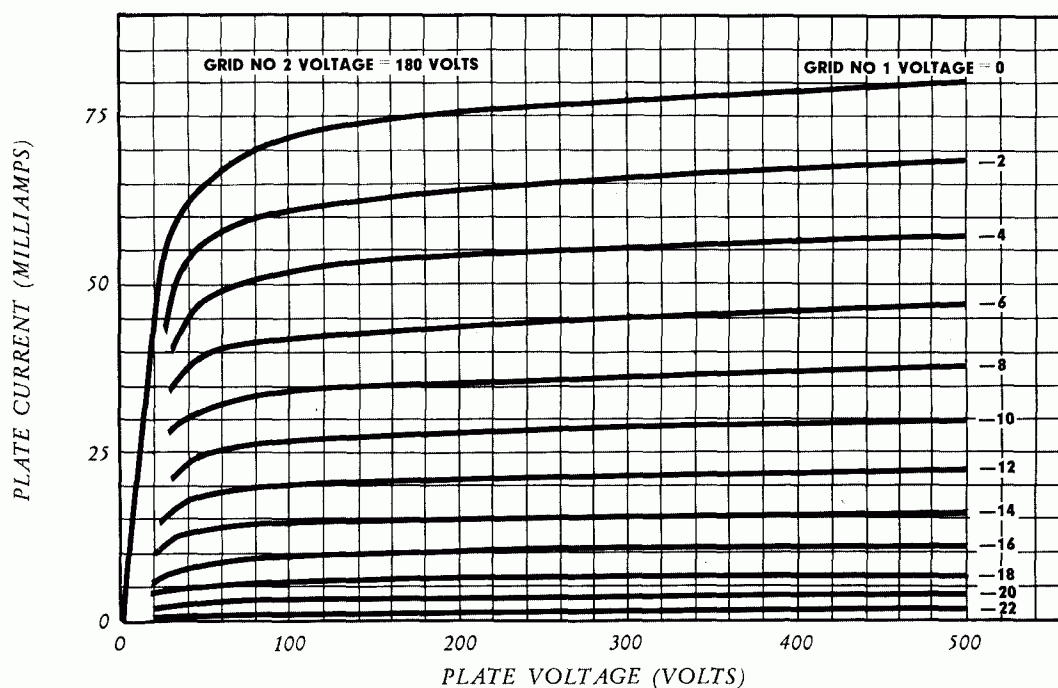
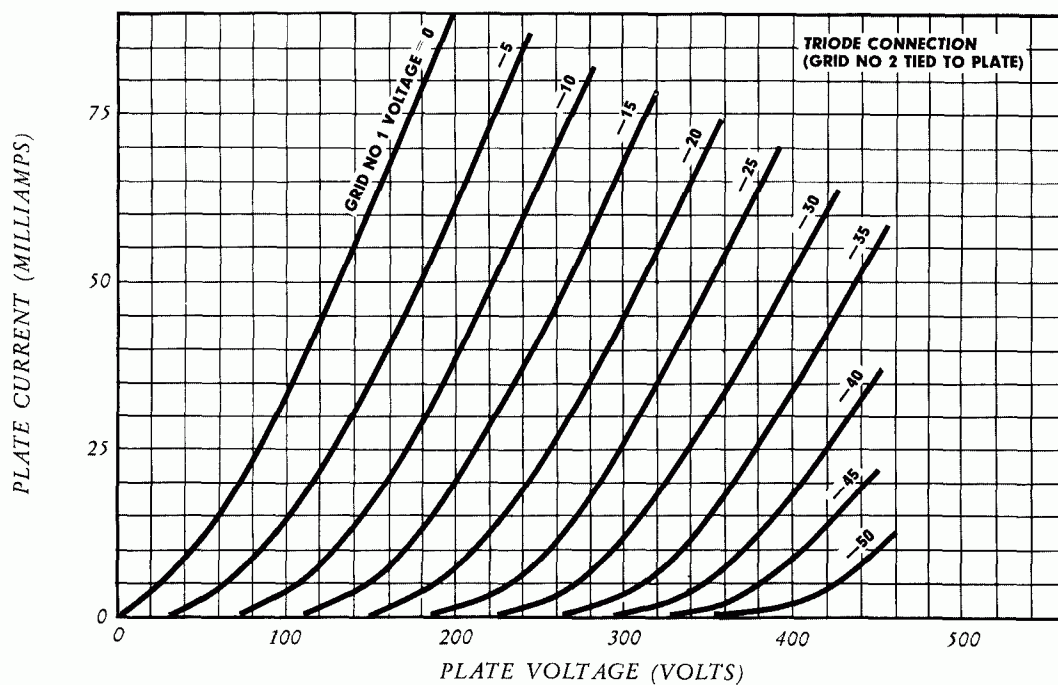


POWER AMPLIFIER PENTODE

6928

6AQ5L

AVERAGE CHARACTERISTICS



6928

6AQ5L

POWER AMPLIFIER PENTODE



AVERAGE CHARACTERISTICS

