



# 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

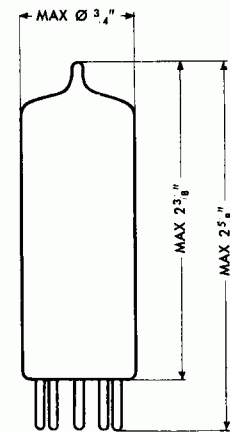
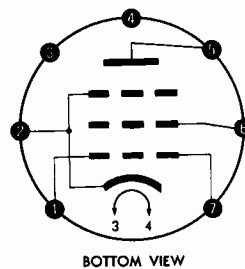
Plate Voltage . . . . .		220	volts
Grid No 2 Voltage . . . . .		220	volts
Grid No 1 Voltage, positive value . . . . .		+ 10	volts
Grid No 1 Voltage, negative value . . . . .		- 55	volts
Cathode Current . . . . .		55	ma
Plate Dissipation . . . . .		9	watts
Grid No 2 Dissipation (see Section A) . . . . .		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



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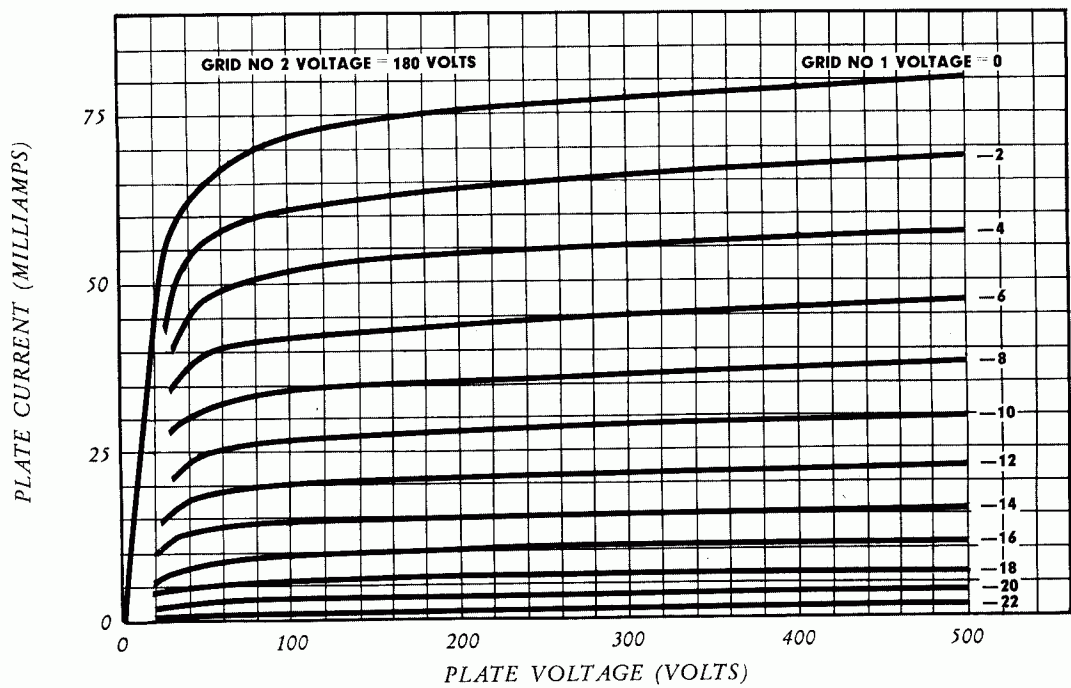
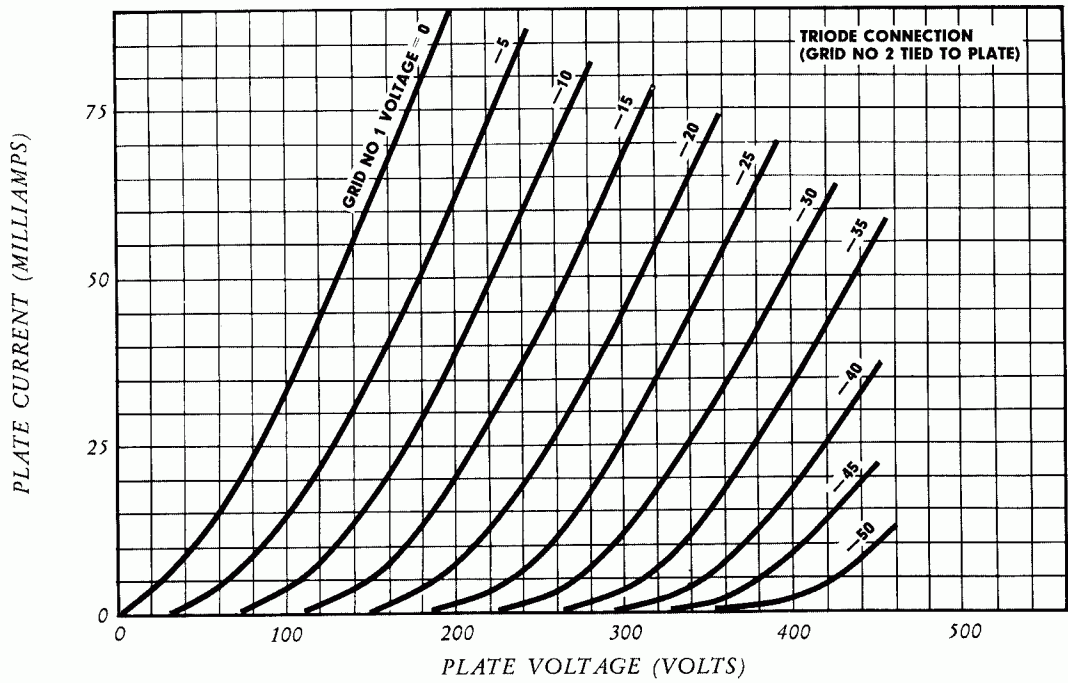
### TYPICAL OPERATION. CLASS A<sub>1</sub>

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	μmhos
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	μmhos
Transconductance, End of Life Point . . . . .	2200			μmhos
I <sub>hk</sub> at E <sub>hk</sub> = ± 100 volts . . . . .			50	μa
Grid No 1 Current . . . . .			-.1	μa
Cutoff Plate Current at E <sub>c1</sub> = - 40 volts . . . . .			200	μa

**AVERAGE CHARACTERISTICS**



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