



## ELECTRONIC TUBE REFERENCE

6088

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

**1 SECTION**  
CONSTRUCTION  
**PENTODE**

Directly heated subminiature power pentode designed for portable, wearable, or low-battery-drain output-amplifier service.

## GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | 512AX             | BASE PINS            | —             |
| NOMINAL HEATER      | 1.25 V / 20 mA    | PARALLEL HEATER      | — / —         |
| HEATING             | Direct            | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

## SECTION RATINGS

|                                                                                                     |                 |
|-----------------------------------------------------------------------------------------------------|-----------------|
| <b>SECTION 1</b> Pentode                                                                            |                 |
| PLATE RESISTANCE                                                                                    | 700000 $\Omega$ |
| TRANSCONDUCTANCE                                                                                    | 0.000625 S      |
| MAXIMUM PLATE VOLTAGE                                                                               | 67.5 V          |
| MAXIMUM SCREEN VOLTAGE                                                                              | 67.5 V          |
| MAXIMUM CATHODE CURRENT                                                                             | 1.5 mA          |
| <i>Published maximum ratings, representative operating conditions, and rectifier data reviewed.</i> |                 |

The 6088 is a low-current subminiature power-amplifier pentode for portable and wearable equipment, using flexible wire leads that may be soldered or welded directly into circuits.

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1938 Raytheon

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1938 RAYTHEON

## Section 1 · Pentode

**CHARACTERISTICS**

| PARAMETER                  | PUBLISHED VALUE | CONDITION / NOTE                          |
|----------------------------|-----------------|-------------------------------------------|
| Heater or filament voltage | 1.25 V          | Published nominal value                   |
| Heater or filament current | 20 mA           | Published nominal or representative value |
| Transconductance           | 625 $\mu$ S     | Published characteristic                  |

## SOURCE OPERATING CONDITIONS

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# 195X General Electric Essential Characteristics

Published test conditions and operating points. Values on this page are preserved as reported by this source.

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

## Section 1 · Pentode

**OTHER**

| PARAMETER              | PUBLISHED VALUE | CONDITION / NOTE          |
|------------------------|-----------------|---------------------------|
| Maximum plate voltage  | 67.5 V          | Published handbook rating |
| Maximum screen voltage | 67.5 V          | Published handbook rating |
| Plate voltage          | 45 V            | ClassA                    |
| Screen voltage         | 45 V            | ClassA                    |
| Control-grid bias      | 1.25 V          | ClassA                    |
| Plate current          | 0.65 mA         | ClassA                    |
| Screen current         | 0.15 mA         | ClassA                    |
| Load resistance        | 80000 ohm       | ClassA                    |

| PARAMETER    | PUBLISHED VALUE | CONDITION / NOTE |
|--------------|-----------------|------------------|
| Power output | 0.0105 W        | ClassA           |

| CHARACTERISTIC          |                 |                                   |
|-------------------------|-----------------|-----------------------------------|
| PARAMETER               | PUBLISHED VALUE | CONDITION / NOTE                  |
| Plate resistance        | 700000 ohm      | Published handbook characteristic |
| Transconductance        | 625 $\mu$ S     | Published handbook characteristic |
| Heater/filament voltage | 1.25 V          | Published heater/filament rating  |
| Heater/filament current | 20 mA           | Published heater/filament rating  |


SOURCE DATA APPENDIX

#### SOURCE OPERATING CONDITIONS

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## 1961 Tung Sol

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1961 TUNG SOL

### Section 1 · Pentode

| OTHER         |                                                  |                  |
|---------------|--------------------------------------------------|------------------|
| PARAMETER     | PUBLISHED VALUE                                  | CONDITION / NOTE |
| Plate Voltage | 45 V                                             | —                |
| Service       | Portable or wearable low-current power amplifier | —                |


SOURCE DATA APPENDIX

#### SOURCE OPERATING CONDITIONS

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## 1966 Tung Sol Electronic Tubes 4 of 4

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1966 TUNG SOL ELECTRONIC TUBES 4 OF 4

### Section 1 · Pentode

| OTHER                    |                 |                  |
|--------------------------|-----------------|------------------|
| PARAMETER                | PUBLISHED VALUE | CONDITION / NOTE |
| Maximum filament voltage | 1.25 V          | WholeTube        |

| PARAMETER                       | PUBLISHED VALUE   | CONDITION / NOTE |
|---------------------------------|-------------------|------------------|
| Maximum plate voltage           | <b>67.5 V</b>     | WholeTube        |
| Maximum screen-grid voltage     | <b>67.5 V</b>     | WholeTube        |
| Maximum cathode current         | <b>1.5 mA</b>     | WholeTube        |
| Filament voltage                | <b>1.25 V</b>     | TypicalOperation |
| Filament current                | <b>20 mA</b>      | TypicalOperation |
| Plate voltage                   | <b>45 V</b>       | TypicalOperation |
| Screen-grid voltage             | <b>45 V</b>       | TypicalOperation |
| Control-grid voltage            | <b>-1.25 V</b>    | TypicalOperation |
| Zero-signal plate current       | <b>650 uA</b>     | TypicalOperation |
| Zero-signal screen-grid current | <b>150 uA</b>     | TypicalOperation |
| Transconductance                | <b>625 uS</b>     | TypicalOperation |
| Plate resistance                | <b>700000 ohm</b> | TypicalOperation |
| Load resistance                 | <b>80000 ohm</b>  | TypicalOperation |
| Power output                    | <b>10.5 mW</b>    | TypicalOperation |
| Distortion                      | <b>10 percent</b> | TypicalOperation |

## TUBE TINKER

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and their source documents.

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