



## ELECTRONIC TUBE REFERENCE

6689

Voltage Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Long-life wideband pentode developed for professional telephone and communications amplifier service with dependable continuous-duty operation.

## GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | —             |
| NOMINAL HEATER      | 6.3 V / 300 mA    | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

## SECTION RATINGS

|                                                                                                 |               |
|-------------------------------------------------------------------------------------------------|---------------|
| SECTION 1 Pentode                                                                               |               |
| PLATE RESISTANCE                                                                                | 2100 $\Omega$ |
| TRANSCONDUCTANCE                                                                                | 0.009 S       |
| AMPLIFICATION FACTOR                                                                            | 34            |
| MAXIMUM PLATE VOLTAGE                                                                           | 210 V         |
| MAXIMUM PLATE DISSIPATION                                                                       | 2.1 W         |
| Published ratings and characteristics promoted from the supplied Rogers/Rogers Majestic source. |               |

6689 is listed in the supplied Amperex material as a wide-band premium amplifier pentode. Published ratings and characteristics were captured from the supplied table.



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1958 Amperex Industrial

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

1958 AMPEREX INDUSTRIAL

## Section 1 · Pentode

| OTHER                 |                 |                  |
|-----------------------|-----------------|------------------|
| PARAMETER             | PUBLISHED VALUE | CONDITION / NOTE |
| Maximum plate voltage | 210 V           | Published table  |
| Plate voltage         | 120 V           | Published table  |
| Screen voltage        | 210 V           | Published table  |
| Plate current         | 16 mA           | Published table  |
| Power output          | 34 W            | Published table  |

| CHARACTERISTIC          |                 |                  |
|-------------------------|-----------------|------------------|
| PARAMETER               | PUBLISHED VALUE | CONDITION / NOTE |
| Plate resistance        | 9000 ohm        | Published table  |
| Heater/filament voltage | 6.3 V           | Published rating |
| Heater/filament current | 300 mA          | Published rating |



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1959 Rogers

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

1959 ROGERS

## Section 1 · Pentode

| CHARACTERISTIC          |                 |                  |
|-------------------------|-----------------|------------------|
| PARAMETER               | PUBLISHED VALUE | CONDITION / NOTE |
| HeaterOrFilamentVoltage | 6.3 V           | —                |
| HeaterOrFilamentCurrent | 300 mA          | —                |

| PARAMETER | PUBLISHED VALUE     | CONDITION / NOTE |
|-----------|---------------------|------------------|
| Service   | Telephone equipment | LongLife         |



SOURCE OPERATING CONDITIONS

SOURCE PDF

# 1963 Amperex Condensed

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

1963 AMPEREX CONDENSED  
Section 1 · Pentode

| CHARACTERISTIC              |                 |                   |
|-----------------------------|-----------------|-------------------|
| PARAMETER                   | PUBLISHED VALUE | CONDITION / NOTE  |
| Heater voltage              | 6.3 V           | Published rating  |
| Heater current              | 300 mA          | Published rating  |
| Plate resistance            | 9000 ohm        | WideBandAmplifier |
| Power/output characteristic | 34              | WideBandAmplifier |

| OTHER          |                 |                   |
|----------------|-----------------|-------------------|
| PARAMETER      | PUBLISHED VALUE | CONDITION / NOTE  |
| Plate voltage  | 120 V           | WideBandAmplifier |
| Screen voltage | 210 V           | WideBandAmplifier |
| Plate current  | 10 mA           | WideBandAmplifier |