



## ELECTRONIC TUBE REFERENCE

## 6550C

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

## 1 SECTION

CONSTRUCTION

## BEAMPOWER

6550-family high-power beam tetrode for audio output service, combining substantial plate dissipation with high-current capability for powerful Class-AB amplifier stages.

## GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | 8             |
| NOMINAL HEATER      | 6.3 V / 1.6 A     | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

## SECTION RATINGS

|                                                                             |          |
|-----------------------------------------------------------------------------|----------|
| SECTION 1 Beam Power                                                        |          |
| TRANSCONDUCTANCE                                                            | 0.0095 S |
| MAXIMUM PLATE VOLTAGE                                                       | 680 V    |
| MAXIMUM SCREEN VOLTAGE                                                      | 400 V    |
| MAXIMUM PLATE DISSIPATION                                                   | 35 W     |
| MAXIMUM SCREEN DISSIPATION                                                  | 6 W      |
| MAXIMUM CATHODE CURRENT                                                     | 175 mA   |
| Section values promoted from published characteristics and maximum ratings. |          |

Glass-envelope beam power pentode for ultralinear audio-frequency power amplification, designed as a direct 6550 replacement with improved reliability and audio performance.

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 199X Svetlana

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

## 199X SVETLANA

## Section 1 · Beam Power

| CHARACTERISTIC             |                 |                  |
|----------------------------|-----------------|------------------|
| PARAMETER                  | PUBLISHED VALUE | CONDITION / NOTE |
| Voltage (AC or DC) 5.7 6.3 | 6.9 V           | SourcePage1-2    |
| Current                    | 1.6 A           | SourcePage1-2    |
| base sleeve and heater     | 18.5 pF         | SourcePage1-2    |
| base sleeve and heater     | 12.5 pF         | SourcePage1-2    |
| Grid no.1 to plate (max)   | 1.1 pF          | SourcePage1-2    |

| OTHER                               |                 |                  |
|-------------------------------------|-----------------|------------------|
| PARAMETER                           | PUBLISHED VALUE | CONDITION / NOTE |
| DC plate voltage                    | 680 V           | SourcePage1-2    |
| Grid no.2 DC (screen) voltage       | 400 V           | SourcePage1-2    |
| Grid no.1 (control) voltage         | -300 V          | SourcePage1-2    |
| DC cathode current                  | 175 mA          | SourcePage1-2    |
| Plate dissipation                   | 35 W            | SourcePage1-2    |
| Grid no.2 (screen) dissipation      | 6 W             | SourcePage1-2    |
| DC plate voltage                    | 400 V           | TypicalOperation |
| Grid no.2 DC (screen) voltage       | 225 V           | TypicalOperation |
| Grid no.1 DC (control) voltage      | -22 V           | TypicalOperation |
| Peak AF grid no.1 (control) voltage | 22 V            | TypicalOperation |
| Zero-signal plate current           | 87 mA           | TypicalOperation |
| Max signal plate current            | 105 mA          | TypicalOperation |

| PARAMETER                             | PUBLISHED VALUE | CONDITION / NOTE |
|---------------------------------------|-----------------|------------------|
| Max signal grid no.2 (screen) current | 18 mA           | TypicalOperation |
| Load resistance                       | 3000 ohms       | TypicalOperation |
| Signal output at 5% distortion        | 12 W            | TypicalOperation |
| Screen Voltage =                      | 250 V           | TypicalOperation |