

ELECTRONIC TUBE REFERENCE

5651WA

Voltage Regulator electronic tube

CONSOLIDATED TECHNICAL DATA  
1 SECTION  
CONSTRUCTION  
VOLTAGEREGULATOR

Ruggedized military cold-cathode voltage-reference tube for stable approximately 86 V reference service under high shock conditions.

GENERAL CHARACTERISTICS

|                     |                        |                      |               |
|---------------------|------------------------|----------------------|---------------|
| BASE DESIGNATION    | —                      | BASE PINS            | 7             |
| NOMINAL HEATER      | — / —                  | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect; cold cathode | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes      | SECTION CONSTRUCTION | Similar       |

SECTION RATINGS

|                                                  |        |
|--------------------------------------------------|--------|
| SECTION1 Voltage Regulator                       |        |
| REGULATOR VOLTAGE                                | 86 V   |
| MINIMUM REGULATOR CURRENT                        | 1.5 mA |
| MAXIMUM REGULATOR CURRENT                        | 3.5 mA |
| STARTING VOLTAGE                                 | 107 V  |
| MAINTAINING VOLTAGE                              | 86 V   |
| Military cold-cathode voltage-reference section. |        |

Ruggedized cold-cathode inert-gas voltage-reference tube for stable 86 V reference service.



## SOURCE OPERATING CONDITIONS

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# 1960 RCA Industrial and Communications Types

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

## 1960 RCA INDUSTRIAL AND COMMUNICATIONS TYPES

## Section 1 · Voltage Regulator

## CROSSREFERENCE

| PARAMETER                     | PUBLISHED VALUE | CONDITION / NOTE |
|-------------------------------|-----------------|------------------|
| Prototype / equivalent family | 5651            | —                |

## OTHER

| PARAMETER              | PUBLISHED VALUE | CONDITION / NOTE |
|------------------------|-----------------|------------------|
| Military specification | MIL-E-1/825A    | —                |



## 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 · Voltage Regulator

## CHARACTERISTIC

| PARAMETER         | PUBLISHED VALUE | CONDITION / NOTE |
|-------------------|-----------------|------------------|
| Operating voltage | 86 V            | —                |

## OTHER

| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE |
|---------------------------|-----------------|------------------|
| Operating current minimum | 1.5 mA          | —                |
| Operating current maximum | 3.5 mA          | —                |

## SOURCE OPERATING CONDITIONS

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# 1966 Tung Sol Electronic Tubes 3 of 4

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

## 1966 TUNG SOL ELECTRONIC TUBES 3 OF 4

## Section 1 · Voltage Regulator

| OTHER                        |                 |                  |
|------------------------------|-----------------|------------------|
| PARAMETER                    | PUBLISHED VALUE | CONDITION / NOTE |
| DC operating current minimum | 1.5 mA          | ReferenceService |
| DC operating current maximum | 3.5 mA          | ReferenceService |
| Maximum shunt capacitor      | 0.02 uF         | ReferenceService |
| Maximum shock                | 450 G           | Ruggedized       |

| CHARACTERISTIC                  |                 |                  |
|---------------------------------|-----------------|------------------|
| PARAMETER                       | PUBLISHED VALUE | CONDITION / NOTE |
| Tube voltage drop at 1.5 mA     | 84.5 V          | ReferenceService |
| Tube voltage drop at 3.5 mA     | 86 V            | ReferenceService |
| Anode breakdown voltage average | 100 V           | ReferenceService |
| Regulation                      | 1 V             | 1.5To3.5mA       |