

ELECTRONIC TUBE REFERENCE

TH8804

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA  
1 SECTION  
CONSTRUCTION  
CATHODERAY

Thomson-CSF storage tube designed for electronic recording, retention, and readout of electrical information. Family variants emphasize transient capture, high-resolution storage, scan conversion, rugged miniature operation, or bright direct viewing.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

|                                                                                               |
|-----------------------------------------------------------------------------------------------|
| SECTION1 Cathode Ray                                                                          |
| No fixed ratings recorded.                                                                    |
| Published ratings/characteristics audited; detailed numeric data retained in parameter table. |

The TH8804 is a scan-converter storage tube for temporary storage and conversion of electrical signals using a writing beam and readout process.

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1972 Thomson CSF

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

1972 THOMSON CSF

## Section 1 · Cathode Ray

| OTHER                                                                     |                 |                                                                                |
|---------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------|
| PARAMETER                                                                 | PUBLISHED VALUE | CONDITION / NOTE                                                               |
| Output signal current . . . . . R [1]                                     | 500 mA          | Output signal current . . . . . R 0.5t02 uA                                    |
| Output signal current . . . . . R [2]                                     | 2 A             | Output signal current . . . . . R 0.5t02 uA                                    |
| OUTPUL CAPACITANCE .+ o o v v et e e e e e e e e ettt et e e e e e et e e | 8 pF            | OUTPUL CAPACITANCE .+ o o v v et e e e e e e e e ettt et e e e e e et e e 8 pF |
| ResolUtion . . . . . i e e e e [1]                                        | 250             | ResolUtion . . . . . i e e e e 250 P.P.1. range rings at 50 % modulation       |
| ResolUtion . . . . . i e e e e [2]                                        | 1               | ResolUtion . . . . . i e e e e 250 P.P.1. range rings at 50 % modulation       |
| ResolUtion . . . . . i e e e e [3]                                        | 50              | ResolUtion . . . . . i e e e e 250 P.P.1. range rings at 50 % modulation       |
| Heater voltage (Note [1])                                                 | 1 V             | Heater voltage (Note 1) . . . . . i i e et e e 6.11t06.5 Vv                    |
| Heater voltage (Note [2])                                                 | 6.11 V          | Heater voltage (Note 1) . . . . . i i e et e e 6.11t06.5 Vv                    |
| Heater voltage (Note [3])                                                 | 6.5 V           | Heater voltage (Note 1) . . . . . i i e et e e 6.11t06.5 Vv                    |
| Cathode k' voltage .. . . . @ittttittt e e e                              | -8 V            | Cathode k' voltage .. . . . @ittttittt e e e -8 kV                             |
| Voltage between heater and cathode . . . . . [P +                         | 150 V           | Voltage between heater and cathode . . . . . [P + 150 \                        |
| Control grid g' [1]                                                       | 1 V             | Control grid g'1 voltage (w.r.t.cathode) . . . . . —180 to O \Y                |
| Control grid g' [2]                                                       | -180 V          | Control grid g'1 voltage (w.r.t.cathode) . . . . . —180 to O \Y                |
| Anode g'                                                                  | 2 V             | Anode g'2voltage .. . e e e connected to target                                |

| PARAMETER                                                     | PUBLISHED VALUE | CONDITION / NOTE                                                               |
|---------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------|
| Focusingg'' [1]                                               | 3 V             | Focusingg''3voltage .. ... -7 1t0 0 kV                                         |
| Focusingg'' [2]                                               | -7 V            | Focusingg''3voltage .. ... -7 1t0 0 kV                                         |
| Focusingg'' [3]                                               | 1 V             | Focusingg''3voltage .. ... -7 1t0 0 kV                                         |
| Focusingg'' [4]                                               | 0 V             | Focusingg''3voltage .. ... -7 1t0 0 kV                                         |
| Heater voltage (NOte [1]                                      | 2 V             | Heater voltage (NOte 2) . . . . . it i e et e e 6.11t06.5 v                    |
| Heater voltage (NOte [2]                                      | 6.11 V          | Heater voltage (NOte 2) . . . . . it i e et e e 6.11t06.5 v                    |
| Heater voltage (NOte [3]                                      | 6.5 V           | Heater voltage (NOte 2) . . . . . it i e et e e 6.11t06.5 v                    |
| Cathode kvoltage . . . . .<br>. . . . .t ee e                 | -1.5 V          | Cathode kvoltage . . . . .t ee e -1.5 kV                                       |
| Voltage between heater<br>andcathode . . . . .<br>. . . . . * | 150 V           | Voltage between heater andcathode . . . . .<br>. . . . . * 150 \               |
| Control grid g1 voltage<br>{w.r.t.cathode) [1]                | -180 V          | Control grid g1 voltage {w.r.t.cathode) . . . . .<br>. . . . . —180 10 O \Y;   |
| Control grid g1 voltage<br>{w.r.t.cathode) [2]                | 10 V            | Control grid g1 voltage {w.r.t.cathode) . . . . .<br>. . . . . —180 10 O \Y;   |
| Anode g2 vOItage . . . . . i<br>e e e                         | -100            | Anode g2 vOItage . . . . . i e e e —100 to O \                                 |
| Erasingg3voltage .<br>. . . . .<br>. . . e e e [1]            | -1.5 V          | Erasingg3voltage . . . . . e e e —<br>1.5t 0 kV                                |
| Erasingg3voltage .<br>. . . . .<br>. . . e e e [2]            | 0 V             | Erasingg3voltage . . . . . e e e —<br>1.5t 0 kV                                |
| Heater voItage . . . . . o<br>vttt i e e e                    | 6.3             | Heater voltage . . . . . o vttt i e e e 6.3 \Y                                 |
| Heater CUrrent, aPProX. . .<br>. vt ittt s e e e e e e e e    | 300 mA          | Heater CUrrent, aPProX. . . . vt ittt s e e e e e e e e 0.3 A                  |
| Cathode k' voltage . . . .<br>. . . . .ttt e e                | -7 V            | Cathode k' voltage . . . . .ttt e e -7 kV                                      |
| Voltage between heater and<br>cathode                         | 0 V             | Voltage between heater and cathode . . . . .<br>. . . . . 0 \Y)                |
| Control grid g' [1]                                           | 1 V             | Control grid g'1 voltage for cut-off (w.r.t.<br>cathode) . . . . . —90to—30 \Y |
| Control grid g' [2]                                           | -90 V           | Control grid g'1 voltage for cut-off (w.r.t.<br>cathode) . . . . . —90to—30 \Y |
|                                                               |                 |                                                                                |

| PARAMETER                                                           | PUBLISHED VALUE | CONDITION / NOTE                                                          |
|---------------------------------------------------------------------|-----------------|---------------------------------------------------------------------------|
| Control grid g' [3]                                                 | <b>30 V</b>     | Control grid g'1 voltage for cut-off (w.r.t. cathode) ... —90to—30 \Y     |
| Focusingg' [1]                                                      | <b>3 V</b>      | Focusingg'3voltage ... e -5 7t0—56.3 kV                                   |
| Focusingg' [2]                                                      | <b>-5 V</b>     | Focusingg'3voltage ... e -5 7t0—56.3 kV                                   |
| Focusingg' [3]                                                      | <b>7 V</b>      | Focusingg'3voltage ... e -5 7t0—56.3 kV                                   |
| Focusingg' [4]                                                      | <b>-56.3 V</b>  | Focusingg'3voltage ... e -5 7t0—56.3 kV                                   |
| Heater voltage . . . . . i it e e e                                 | <b>6.3 V</b>    | Heater voltage . . . . . i it e e e 6.3 A                                 |
| Heater current, @pPrOX. . o v it ittt e e e e e e e e e e e e e e e | <b>300 mA</b>   | Heater current, @pPrOX. . o v it ittt e e e e e e e e e e e e e e e 0.3 A |
| Cathodek voltage . . . . . i e e i e                                | <b>-1.2 V</b>   | Cathodek voltage . . . . . i e e i e -1.2 kV                              |
| Voltage between heater andcathode                                   | <b>0 V</b>      | Voltage between heater andcathode . . . . . 0 \'                          |
| Control grid g1 voltage for cut-off (w.r.t. cathode) [1]            | <b>-90 V</b>    | Control grid g1 voltage for cut-off (w.r.t. cathode) . . . . . —90to—30 \ |
| Control grid g1 voltage for cut-off (w.r.t. cathode) [2]            | <b>30 V</b>     | Control grid g1 voltage for cut-off (w.r.t. cathode) . . . . . —90to—30 \ |
| Anode g2 voltage . . . . . e e e e [1]                              | <b>-40 V</b>    | Anode g2 voltage . . . . . e e e e —40to 0 \'                             |
| Anode g2 voltage . . . . . e e e e [2]                              | <b>0 V</b>      | Anode g2 voltage . . . . . e e e e —40to 0 \'                             |
| Focusing gd voltage . . . . . e [1]                                 | <b>-1.2 V</b>   | Focusing gd voltage . . . . . e —1.2to — 1.0 kV                           |
| Focusing gd voltage . . . . . e [2]                                 | <b>1 V</b>      | Focusing gd voltage . . . . . e —1.2to — 1.0 kV                           |
| Collectorvoltage . . . . . oottt e e e e e [1]                      | <b>0 V</b>      | Collectorvoltage . . . . . oottt e e e e e 0 to 40 A                      |
| Collectorvoltage . . . . . oottt e e e e e [2]                      | <b>40 V</b>     | Collectorvoltage . . . . . oottt e e e e e 0 to 40 A                      |
| Shading corrector voltage (w.r.t. collector voltage) [1]            | <b>0 V</b>      | Shading corrector voltage (w.r.t. collector voltage) ... 0 to 20 \Y       |
| Shading corrector voltage (w.r.t. collector voltage) [2]            | <b>20 V</b>     | Shading corrector voltage (w.r.t. collector voltage) ... 0 to 20 \Y       |
| Published value [1]                                                 | <b>1</b>        | 1 Heater insulated for 8 kV w.r.t. ground.                                |
| Published value [2]                                                 | <b>8</b>        | 1 Heater insulated for 8 kV w.r.t. ground.                                |

| PARAMETER                                           | PUBLISHED VALUE | CONDITION / NOTE                                                                                              |
|-----------------------------------------------------|-----------------|---------------------------------------------------------------------------------------------------------------|
| Published value [1]                                 | 2               | 2 - Heater insulated for 2 kV w.r.t: ground.                                                                  |
| Published value [2]                                 | 2               | 2 - Heater insulated for 2 kV w.r.t: ground.                                                                  |
| Published value                                     | 3               | 3 - Provide a suitable shield in order to protect the tube from stray electric and magnetic fields.           |
| The secondaries collected by the output electrode ( | 4               | The secondaries collected by the output electrode (4) give rise to a video signal progressively decreasing.   |
| Typigall decay curves given in Fig                  | 2 V             | Typigall decay curves given in Fig. 2 are obtained by changing both collector voltage and/or reading current. |
| Published value [1]                                 | 100 V           | 100 Target voltage 0 ———.4]~J—_—.                                                                             |
| Published value [2]                                 | 0 V             | 100 Target voltage 0 ———.4]~J—_—.                                                                             |
| Published value [3]                                 | 4 V             | 100 Target voltage 0 ———.4]~J—_—.                                                                             |
| RELATIVE SIGNAL OUTPUT {                            | 7               | RELATIVE SIGNAL OUTPUT {7)                                                                                    |
| grid g3 voltage                                     | 0 V             | grid g3 voltage 0 ]                                                                                           |

## TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

[Catalog](#)   [Tube types](#)   [Full books](#)   [Blog](#)   [Feedback & corrections](#)

© 2026 Tube Tinker