

TUNG-SOL

CATHODE RAY

THE 16CP4 IS A DIRECT-VIEW PICTURE TUBE DESIGNED FOR USE IN TELEVISION APPLICATIONS. ITS FEATURES INCLUDE:

UNIPOTENTIAL CATHODE ROUND GLASS CONSTRUCTION
 MAGNETIC FOCUS & DEFLECTION DOUBLE FIELD ION TRAP MAGNET
 10 1/4" X 14 1/2" RASTER SIZE

ELECTRICAL DATA

| | | |
|----------------------------|----|----------|
| FOCUSING METHOD | | MAGNETIC |
| DEFLECTING METHOD | | MAGNETIC |
| DEFLECTION ANGLE (APPROX.) | 52 | DEGREES |

OPTICAL DATA

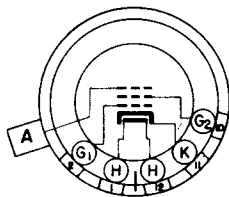
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|----------------------|--------|
| PHOSPHOR NUMBER | NO. 4 |
| FLUORESCENT COLOR | WHITE |
| PHOSPHORESCENT COLOR | WHITE |
| PERSISTENCE | MEDIUM |

MECHANICAL DATA

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|--------------------------------|--|--------|
| OVERALL LENGTH | 21 1/2 ± 3/8 | INCHES |
| GREATEST DIAMETER OF BULB | 15 7/8 ± 1/8 | INCHES |
| MINIMUM USEFUL SCREEN DIAMETER | 15 | INCHES |
| BULB CONTACT | RECESSED SMALL CAVITY CAP | J1-21 |
| BASE | SMALL SHELL DUODECAL 5 PIN | B5-57 |
| BASING | | 12D |
| BULB CONTACT ALIGNMENT | | |
| | J1-21 CONTACT ALIGNS WITH PIN POSITION #3 ± 10 DEGREES | |

PIN CONNECTIONS

PIN 1 - HEATER
 PIN 2 - GRID NO. 1
 PIN 10 - GRID NO. 2



PIN 11 - CATHODE
 PIN 12 - HEATER
 ANODE CAP

BOTTOM VIEW

CONTINUED ON FOLLOWING PAGE

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CONTINUED FROM PRECEDING PAGE

RATINGS

DESIGN CENTER VALUES

| | | |
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| HEATER VOLTAGE | 6.3 | VOLTS |
| HEATER CURRENT | 0.6 | AMP. |
| MAXIMUM DC ANODE VOLTAGE | 15 000 | VOLTS |
| MAXIMUM DC GRID #2 VOLTAGE | 410 | VOLTS |
| MAXIMUM GRID #1 VOLTAGE: | | |
| DC NEGATIVE-BIAS VALUE | 125 | VOLTS |
| DC POSITIVE-BIAS VALUE | 0 | VOLTS |
| POSITIVE-PEAK VALUE | 2 | VOLTS |
| MAXIMUM DC PEAK HEATER-CATHODE VOLTAGE: | | |
| HEATER NEGATIVE WITH RESPECT TO CATHODE | | |
| DURING WARM-UP PERIOD NOT TO EXCEED 15 SECONDS | 410 | VOLTS |
| AFTER EQUIPMENT WARM-UP PERIOD | 125 | VOLTS |
| HEATER POSITIVE WITH RESPECT TO CATHODE | 125 | VOLTS |

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

| | | |
|--|------------|-------|
| DC ANODE VOLTAGE | 12 000 | VOLTS |
| DC GRID #2 VOLTAGE | 250 | VOLTS |
| DC GRID #1 VOLTAGE ^A | -27 TO -63 | VOLTS |
| DC FOCUSING COIL CURRENT ^B (APPROX.) | 110 | MA. |
| DC ION TRAP CURRENT STANDARD COIL #10B (APPROX.) | 120 | MA. |

^A VISUAL EXTINCTION OF UNDEFLECTED FOCUSED SPOT.^B FOR STANDARD FOCUS COIL #109, OR EQUIVALENT, WITH THE COMBINED GRID #1 BIAS VOLTAGE AND VIDEO SIGNAL VOLTAGE ADJUSTED TO PRODUCE A HIGHLIGHT BRIGHTNESS OF 20 FOOT LAMBERTS ON A 10 1/4" BY 14 1/2" PICTURE SIZE. DISTANCE FROM REFERENCE LINE TO CENTER OF AIR GAP ON FOCUS COIL SHALL BE 3.25 INCHES.**CIRCUIT VALUES**

| | | |
|------------------------------------|-----|----------|
| MAXIMUM GRID #1 CIRCUIT RESISTANCE | 1.5 | MEG OHMS |
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