TUMB-SOL -

CATHODE RAY

THE 17AVP4 AND 17AVP4A ARE DIRECT VIEW PICTURE TUBES DESIGNED FOR TELEVISION APPLICATIONS. THEY ARE IDENTICAL EXCEPT FOR THE ALUMINIZED SCREEN ON THE 17AVP4A. THEIR COMMON FEATURES INCLUDE:

UNIPOTENTIAL CATHODE EXTERNAL CONDUCTIVE COATING RECTANGULAR GLASS CONSTRUCTION LOW VOLTAGE ELECTROSTATIC FOCUS

CTIVE COATING MAGNETIC DEFLECTION
CONSTRUCTION FILTERGLASS FACEPLATE
OSTATIC FOCUS EXTERNAL SINGLE FIELD ION TRAP
10 3/4" X 14 1/4" RASTER SIZE

ELECTRICAL DATA

| FOCUSING METHOD | LOW | VOLTAGE | ELECTROSTATIC |
|---|-----|----------|---------------|
| DEFLECTING METHOD | | | MAGNETIC |
| DEFLECTION ANGLE (APPROX.): | | | |
| HORIZONTAL | | 85 | DEGREES |
| VERTICAL | | 85 68 | DEGREES |
| DIAGONAL | | 90 | DEGREES |
| DIRECT INTERELECTRODE CAPACITANCES (APPROX.): | | | |
| CATHODE TO ALL OTHER ELECTRODES | | 5 | ии f |
| GRID #1 TO ALL OTHER ELECTRODES | | 6 | иµ f |
| MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE | | 1 500 | ии f |
| MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE | | 750 | ии f |

OPTICAL DATA

| PHOSPHOR NUMBER | P-4 |
|----------------------|---------|
| FLUORESCENT COLOR | WH I.TE |
| PHOSPHORESCENT COLOR | WHITE |
| PERSISTENCE | SHORT |

RATINGS

| DESIGN CENIER VALUES | _ | |
|--|----------|--------------|
| HEATER VOLTAGE | 6.3 | VOLTS |
| HEATER CURRENT | 0.6 | AMP. |
| MAXIMUM DC COLLECTOR, GRID #3, GRID #5 VOLTAGE | 16 000 | VOLTS |
| MAXIMUM DC GRID #4 VOLTAGEA -500 | TO +1000 | VOLTS |
| MAXIMUM DC GRID #2 VOLTAGE | 500 | VOLTS |
| MAXIMUM GRID #4 VOLTAGE: | | |
| DC NEGATIVE-BIAS VALUE | 125 | VOLTS |
| DC POSITIVE-BIAS VALUE | Ō | VOLTS |
| POSITIVE-PEAK VALUE | 2 | VOL TS |
| MAXIMUM DC PEAK HEATER-CATHODE VOLTAGE: | | |
| HEATER NEGATIVE WITH RESPECT TO CATHODE | | |
| DURING WARM-UP PERIOD NOT TO EXCEED 15 SECONDS | 410 | VOL TS |
| AFTER EQUIPMENT WARM-UP PERIOD | 180 | VOLTS |
| HEATER POSITIVE WITH RESPECT TO CATHODE | 180 | VOLTS |
| MAXIMUM GRID #4 CIRCUIT RESISTANCE | 1.5 | MEGOHMS |

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

| DC COLLECTOR, GRID #3, GRID #5 VOLTAGE | 12 000 | VOL TS |
|---|-------------|--------|
| DC GRID #4 VOLTAGE (FOCUSING ELECTRODE) B | -48 то +264 | VOLTS |
| DC GRID #2 VOLTAGE | 300 | VOLTS |
| DC GRID #1 VOLTAGE ^C | -33 to -77 | VOL TS |
| DC GRID #2 CURRENT | -15 TO +15 | HAMP. |
| DC FOCUSING COIL CURRENT (APPROX.) | -25 TO +25 | MAMP. |
| ION TRAP CURRENT STANDARD COIL #447 (APPROX.) | 30 | MA. |

ATHE FOCUS ELECTRODE MAY BE MODULATED TO IMPROVE OVERALL FOCUS.

CONTINUED ON FOLLOWING PAGE

BWITH THE COMBINED GRID #1 VOLTAGE AND VIDEO-SIGNAL VOLTAGE ADJUSTED TO GIVE A COLLECTOR CURRENT OF 100 MICROAMPERES ON A 10 3/4" X 14 1/4" PICTURE AREA.

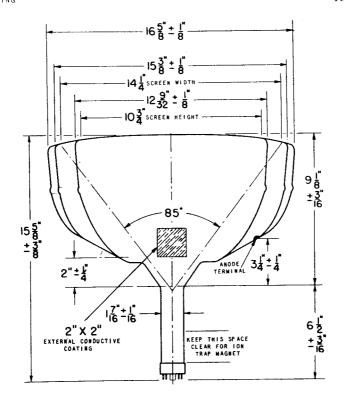
CVISUAL EXTINCTION OF UNDEFLECTED FOCUSED SPOT-

- TUNG·SOL

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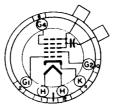
MECHANICAL DATA

| OVERALL LENGTH | 15 5/8 ± | 3/8 | INCHES |
|---|-----------------------------------|------------|----------------------------|
| GREATEST DIMENSIONS OF BULB: DIAGONAL WIDTH HEIGHT | 16 5/8 ± 15 3/8 ± 12 9/32 ± | 1/8 | INCHES INCHES INCHES |
| MINIMUM USEFUL SCREEN DIMENSIONS: WIDTH HEIGHT | 14 | 1/4 3/4 | INCHES INCHES |
| BULB CONTACT | RECESSED SMALL CAVITY | CAP | J1-21 |
| BASE | SMALL SHELL DUODECAL 6 | PIN | B6-63 |
| BASING | | | 124 |



PIN CONNECTIONS

PIN 1 - HEATER
PIN 2 - GRID #1
PIN 6 - GRID #2
PIN 10 - GRID #2
PIN 11 - CATHODE



PIN 12 - HEATER ANODE CAP: GRID #3 GRID #5 COLLECTOR

BOTTOM VIEW

SOCKET FOR THIS BASE SMOULD NOT BERIGIOLY MOUNTED: IT SHOULD HAVE FLEXIBLE LEADS AND BE ALLOWED TO MOVE FREELY.