# THES. SEL

## CATHODE RAY

THE 16VP4 IS A DIRECT-VIEW PICTURE TUBE DESIGNED FOR USE IN TELEVISION APPLICATIONS. ITS FEATURES INCLUDE:

UNIPOTENTIAL CATHODE
MAGNETIC FOCUS & DEFLECTION
EXTERNAL SINGLE FIELD ION TRAP

GREY FILTER FACEPLATE
ROUND GLASS CONSTRUCTION
10 1/4" X 14 1/2" RASTER SIZE

### ELECTRICAL DATA

FOCUSING METHOD
DEFLECTING METHOD
DEFLECTION ANGLE (APPROX.)

MAGNETIC 70 DEGREES

MAGNETIC

#### OPTICAL DATA

PHOSPHOR NUMBER

FLUDRESCENT COLOR

PHOSPHORESCENT COLOR

PHOSPHORESCENT COLOR

PERSISTENCE

MEDIUM

FACEPLATE LEGHT TRANSMISSION AT CENTER (APPROX.)

70 PERCENT

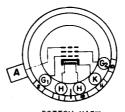
# MECHANICAL DATA

17 3/16 ± 3/8 OVERALL LENGTH INCHES  $15 \ 7/8 \pm 1/8$ GREATEST DIAMETER OF BULB INCHES MINIMUM USEFUL SCREEN DIAMETER 14 1/2 INCHÉS BULB CONTACT RECESSED SMALL CAVITY CAP J1-21 SMALL SHELL DUODECAL 5 PIN BASE B5-57 BASING 120 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

# --- TUNG-SOL --

#### CONTINUED FROM PRECEDING PAGE

#### RATINGS DESIGN CENTER VALUES

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 45 SECONDS	410	VOLTS
AFTER EQUIPMENT WARM-UP RERIOD	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 #4 VOLTAGE <sup>A</sup>	<del>-</del> 27 то <del>-</del> 63	VOLTS
DC FOCUSING COIL CURRENT (APPROX.) B	110	MA.
DC ION TRAP CURRENT STANDARD COIL #111 (APPROX.)	120	MA.

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### CIRCUIT VALUES

MAXIMUM GRID #1 CIRCUIT RESISTANCE 1.5 MEGOHMS

BFOR 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 3.0 INCHES.