# TUNE-SOL -

#### CATHODE RAY

THE 16RP4 AND 16RP4A ARE DIRECT-VIEW PICTURE TUBES DESIGNED FOR USE IN TELEVISION APPLICATIONS. THEY ARE IDENTICAL WITH THE FOLLOWING EXCEPTION:

16RP4A - ALUMINIZED SCREEN

THEIR COMMON FEATURES INCLUDE:

GREY FILTER FACEPLATE

UNIPOTENTIAL CATHODE
MAGNETIC FOCUS & DEFLECTION
EXTERNAL SINGLE FIELD ION TRAP

EXTERNAL CONDUCTIVE COATING 10 1/8" X 13 1/2" RASTER SIZE RECTANGULAR GLASS CONSTRUCTION

### ELECTRICAL DATA

FOCUSING METHODE		MAGNETIC
DEFLECTING METHOD		MAGNETIC
DEFLECTION ANGLE (APPROX.):		
HORIZONTAL	65	DEGREES
DIAGONAL	7C	DEGREES
DIRECT INTERELECTRODE CAPACITANCES (APPROX.):		
CATHODE TO ALL OTHER ELECTRODES	5	μμ f
GRID #1 TO ALL OTHER ELECTRODES	6	μμf
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	1 500	μμ. f
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	750	μμf
OPTICAL DATA		
PHOSPHOD NAMED		

PHOSPHOR NUMBER	NO. 4
FLUORESCENT COLOR	WHITE
PHOSPHORESCENT COLOR	WHITE
PERSISTENCE	MEDIUM
FACEPLATE LIGHT TRANSMISSION AT CENTER (APPROX.) 66	PERCENT

#### RATINGS

RATINGS		
INTERPRETED ACCORDING TO DESIGN CENTER SYSTE	м	
HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.6	AMP.
MAXIMUM DC ANODE VOLTAGE	16 000	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	410	VOLTS
MAXIMUM GRID #1 VOLTAGE:		
DC NEGATIVE—BIAS VALUE	125	VOL TS
DC POSITIVE-BIAS VALUE	0	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	150	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	150	VOLTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE	วัร	MEGOHNE

#### TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

DC ANODE VOLTAGE	12 000	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #1 VOLTAGE <sup>A</sup>	-33 to -77	VOLTS
DC FOCUSING COIL CURRENT <sup>B</sup> (APPROX.)	100 <u>+</u> 20%	MA.
DC ION TRAP CURRENT STANDARD COIL #111 (APPRO	0x.) 75 ± 50%	MA.

AVISUAL EXTINCTION OF UNDEFLECTED FOCUSED SPOT.

CONTINUED ON FOLLOWING PAGE

Be or standard focus coil \$109, or equivalent, with the combined grid \$1 Bias voltage and video signal voltage adjusted to produce a highlight brightness of 30 foot lamberts on a 10 1/8" BY 13 1/2" PICTURE SIZE. DISTANCE FROM REFERENCE LINE TO CENTER OF AIR GAP ON FOCUS COIL SHALL BE 3-50 INCHES.

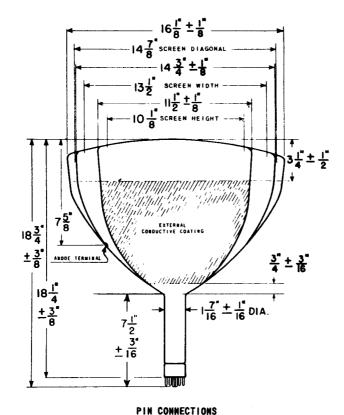
### TUM6-SOL

CONTINUED FROM PRECEDING PAGE

## MECHANICAL DATA

1.25			
OVERALL LENGTH	18 3/4 ±	3/8	INCHES
GREATEST DIMENSIONS OF BULB:			
DIAGONAL	16 1/8 ±	1/8	INCHES
WIDTH .	14 3/4 ±	1/8	INCHES
HEIGHT	11 1/2 ±	1/8	INCHES
MINIMUM USEFUL SCREEN DIMENSION	is:		
DIAGONAL	14	7/8	INCHES
WIDTH	13	1/2	INCHES
HEIGHT	10	1/8	INCHES
BULB CONTACT	RECESSED SMALL CAVITY	CAP	Ji-21
BASE	SMALL SHELL DUODECAL 5	PIN	85-57
BASING			12N
BULB CONTACT ALIGNMENT			

J1-21 CONTACT ALIGNS WITH PIN POSITION #6 ± 30 DEGREES







PIN 11 - CATHODE PIN 12 - HEATER ANODE CAP