ELECTRONIC TUBE REFERENCE

10AMP7

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
CATHODERAY-TRIODE

Low-drive cathode-ray display tube designed for low-voltage electrostatic drive, capable of full-brightness modulation from a small input signal while operating its CRT anode at about 10 kV.

General characteristics

BASE DESIGNATION	_	**BASE PINS**	_
NOMINAL HEATER	8 V / –	**PARALLEL HEATER**	– / –
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Dissimilar

Section ratings

SECTION1 Triode

TRANSCONDUCTANCE	0.00001 S

Source-derived physical section; applicable promoted ratings are populated from the printed sheet.

SECTION2 Cathode Ray

No fixed ratings recorded.

Source-derived physical section; applicable promoted ratings are populated from the printed sheet.

Low Drive Type 10AMP7 July 6, 1960 HIGH TRANSCONDUCTANCE RADAR DISFLAY TUBE TYPE 10AMF7 The 10AMP7 is a low drive cathode ray tube with low-voltage-electrostatic focus and magnetic deflection designed for service in radar display appli- cations. An input sigaal of 3,5 to 5.5 volts having a bandwidth of 13 mega~ cycles will drive the tube to full brightaess (400 to 750 microamperes peak anode current), Other characteristics include round glass construction, relatively flat, neutral gray glass faceplate and a long-persistence P 7 screeun, ELECTRICAL:
Cathode,esessesseasancrsarrorosasassccrscancsnsass COated Unipotential Heater: Voltage (8C OF dC)uvesvesveccnosoossvnsnnoscone 6.3 Volts Current O @ OO EER YA S OP A sSSP PERYOTS VNI

VVYVOER 0¢6 % 10% Ampere Direct Interelectrode Capacitaaces: - Triode Unit: Grid to Cathode...iuieeusnrvosooenrossrosrennonasne &ad Auf Grid to Plate (Note 1)...eiesesccnssansosoesonsasse 243 bty Gri¢ to CRT Gun Grid l,,..iecvscereoscocasonnsesase 1.0 CRT Gun Un

SOURCE OPERATING CONDITIONS

1947 Westinghouse

SOURCE PDF

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

1947 WESTINGHOUSE

Section 2 · Cathode Ray

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Type	**10 A**	Type 10AMP7
The	**10 A**	The 10AMP7 is a low drive cathode ray tube with low-voltage-electrostatic
cations. An input sigaal of	**13 V**	cations. An input sigaal of 3,5 to 5.5 volts having a bandwidth of 13 mega~
cycles will drive the tube to full brightaess (	**750 Hz**	cycles will drive the tube to full brightaess (400 to 750 microamperes peak
Voltage (	**6.3 V**	Voltage (8C OF dC)uvesvesveccnosoossvnsnnoscone 6.3 Volts
Current O @ OO EER YA S OP A sSSP PERYOTS VNI VVYVOER	**10 A**	Current O @ OO EER YA S OP A sSSP PERYOTS VNI VVYVOER 0¢6 % 10% Ampere
Grid	**3.9 pF**	Grid 1 to all electrodes except Grid 2 (Note 1).... 3.9 pf
OUtputeooaooco-.oc-oaaoo-o--oo-n-uo--c-cc-o-anac--ooc	**8 pF**	OUtputeooaooco-.oc-oaaoo-o--oo-n-uo--c-cc-o-anac--ooc 8 jHPf
10AMP7	**10 A**	10AMP7
Anode VOlta@".ll....."'...'..l.""..'l	**12000 V**	Anode VOlta@".ll....."'...'..l.""..'l.... 12000 max' volts
Grid	**1000 V**	Grid 4 (Focus) Voltage.e.eeeecvsceseocssecssass 1000 max, Volts
Grid	**350 V**	Grid 2 & Triode Plate Voltage...vvseesccceveess 350 max, Volts
Grid	**1 V**	Grid 1 Voltage:
mgative Bias Value..."'l.'.'.....'..l'..'.	**150 V**	mgative Bias Value..."'l.'.'.....'..l'..'.. 150 max. volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Positive Bias value....l‘..‘.......‘......”	**0 V**	Positive Bias value....l‘..‘.......‘......”. 0 max. Volts
Positive Peak Valu€.eeeescoveecscesscscacsnns	**0 V**	Positive Peak Valu€.eeeescoveecscesscscacsnns 0 max, Volts
Heater—Positive with respect to Cathode.,.,	**180 V**	Heater—Positive with respect to Cathode.,.,... 180 max., Volts
Grid I‘bgfltive Biascooouooo-ooouraoopooooooooooo	**50 V**	Grid I‘bgfltive Biascooouooo-ooouraoopooooooooooo 50 max, Volts
CRT Gun Grid	**0.5 ohm**	CRT Gun Grid 1 Circuit RBSiBtflnce.o.-ncooa-cov-n 0.5 max,]“bgohm
AnOde V°	**10000 V**	AnOde V°1tagel..000!00.00.....0‘0...‘0.0....00.‘00 10000 volts
Grid	**600 V**	Grid 4 (Pocus) Voltage (Notes 5 & 6)eeeessesesssss O to 600 Volts
Grid	**300 V**	Grid 2 & Triode Plate Supply Voltage, Ebb { Note 1) 300 Volts
Grid	**160 V**	Grid 2 & Triode Plate Voltage, Ebo (Notes 6 & 7)... 160 Volts
Grid	**250 V**	Grid 1 Supply Voltage, Eccl (Note 2)...eeeessss =200 to =250 Volts
Grid	**40 V**	Grid 1 Voltage for Spot Cut-off, Eco {Note 8) =25 to =40 Volts
Grid Bias Voltage (Notes	**6.5 V**	Grid Bias Voltage (Notes 6 & 9).svevececesnoscccanses =6.5 Volts
6800 Ohms	**6800 ohm**	6800 Ohms
A peak value of	**410 V**	A peak value of 410 volts design ceater maximum may be applied for not
more than	**15 s**	more than 15 seconds during equipment warm-up periods,
100 microamperes,	**100 µA**	100 microamperes,
Measured at	**100 µA**	Measured at 100 microamperes anode current,
Epg	**20 V**	Epg 1s the qulescent plate voltage at zero signal input (20 mA plate
10, At indicated quiescent plate voltage E,, operating point,	**10 V**	10, At indicated quiescent plate voltage E,, operating point,
having an	**18 mm**	having an 18 mm radius concentric with the ceater of the tube face,

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
2, Radial tolerance of alignment of enode terminal with 3 is ¥ 10 degr	**10 deg**	2, Radial tolerance of alignment of enode terminal with 3 is ¥ 10 degrees.

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification Factor.....‘	**20 A**	Amplification Factor.....‘..... 20
Plete Resistance (NO'tB	**15100 ohm**	Plete Resistance (NO'tB 10)...n..oo..ooooooooooooo-oo 15100 Ohms

Tube Tinker

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

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