

ELECTRONIC TUBE REFERENCE

R78A

Specialized - Photo Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PHOTOEMISSIVEDETECTOR

Visitron gas-filled S1 phototube with an extra-large cathode for broad light-beam pickup, commonly used in theatre projection equipment. Its construction emphasizes consistent optical reproduction and gas-enhanced sensitivity.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	— / —	PARALLEL HEATER	— / —
HEATING	Indirect; cold cathode	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 PhotoemissiveDetector	
MAXIMUM PLATE VOLTAGE	90 V
Photoelectric section. Published anode-cathode capacitance approximately 2.5 pF.	

The Visitron R79 is a tube having an extra large cathode designed for a maximum area of light beam, commonly used in standard theatre projection equipment. A sturdy tube to give constant quality Identical to the R79 series in electrical and four prong base instead of flexible leads. This variant uses the S1 cathode surface described by the family datasheet. The non-V variant has published gas amplification in the family table.

SOURCE OPERATING CONDITIONS

195X Visitron Rauland

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

195X VISITRON RAULAND

Section 1 · PhotoemissiveDetector

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Anode Voltage	90 V	Variant-specific maximum rating
Anode-Cathode Capacitance	2.5 pF	Variant-specific general characteristic
Cathode Size [1]	1.625	Cathode Size.. ... 1.625"x1.125" 1.625"x1.125" 1.625"x1.125" 1.625"x1.125"
Cathode Size [2]	125	Cathode Size.. ... 1.625"x1.125" 1.625"x1.125" 1.625"x1.125" 1.625"x1.125"
Cathode Size [3]	1.625	Cathode Size.. ... 1.625"x1.125" 1.625"x1.125" 1.625"x1.125" 1.625"x1.125"
Cathode Size [4]	125	Cathode Size.. ... 1.625"x1.125" 1.625"x1.125" 1.625"x1.125" 1.625"x1.125"
Cathode Size [5]	1.625	Cathode Size.. ... 1.625"x1.125" 1.625"x1.125" 1.625"x1.125" 1.625"x1.125"
Cathode Size [6]	125	Cathode Size.. ... 1.625"x1.125" 1.625"x1.125" 1.625"x1.125" 1.625"x1.125"
Cathode Size [7]	1.625	Cathode Size.. ... 1.625"x1.125" 1.625"x1.125" 1.625"x1.125" 1.625"x1.125"
Cathode Size [8]	125	Cathode Size.. ... 1.625"x1.125" 1.625"x1.125" 1.625"x1.125" 1.625"x1.125"
Capacitance (Anode-Cathode) [1]	2.5 pF	Capacitance (Anode-Cathode) ... 2.5 MMF. 2.0 MMF. 2.5 MMF. 2.0 MMF.
Capacitance (Anode-Cathode) [2]	2 pF	Capacitance (Anode-Cathode) ... 2.5 MMF. 2.0 MMF. 2.5 MMF. 2.0 MMF.
Capacitance (Anode-Cathode) [3]	2.5 pF	Capacitance (Anode-Cathode) ... 2.5 MMF. 2.0 MMF. 2.5 MMF. 2.0 MMF.
Capacitance (Anode-Cathode) [4]	2 pF	Capacitance (Anode-Cathode) ... 2.5 MMF. 2.0 MMF. 2.5 MMF. 2.0 MMF.
Leakage Resistance (Min) [1]	1000 Mohm	Leakage Resistance (Min) 1000 Meg. 1000 Meg. 1000 Meg. 1000 Meg.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Leakage Resistance (Min) [2]	1000 Mohm	Leakage Resistance (Min) 1000 Meg. 1000 Meg. 1000 Meg. 1000 Meg.
Leakage Resistance (Min) [3]	1000 Mohm	Leakage Resistance (Min) 1000 Meg. 1000 Meg. 1000 Meg. 1000 Meg.
Leakage Resistance (Min) [4]	1000 Mohm	Leakage Resistance (Min) 1000 Meg. 1000 Meg. 1000 Meg. 1000 Meg.
Anode Voltage, Peak. oo [1]	9 V	Anode Voltage, Peak. oo 9oV SO0V v 500V
Anode Voltage, Peak. oo [2]	500 V	Anode Voltage, Peak. oo 9oV SO0V v 500V
Luminous Sensitivity [1]	225 V	Luminous Sensitivity 225 uW/L DC 40 uA/L DC 225 uA/L DC 40 vA/L DC
Luminous Sensitivity [2]	40 V	Luminous Sensitivity 225 uW/L DC 40 uA/L DC 225 uA/L DC 40 vA/L DC
Luminous Sensitivity [3]	225 V	Luminous Sensitivity 225 uW/L DC 40 uA/L DC 225 uA/L DC 40 vA/L DC
Luminous Sensitivity [4]	40 V	Luminous Sensitivity 225 uW/L DC 40 uA/L DC 225 uA/L DC 40 vA/L DC
Luminous Sensitivity ([1]	25 V	Luminous Sensitivity (25v) 40 vA/L DC 35 uA/L DC 40 uA/L DC 35 uA/L DC
Luminous Sensitivity ([2]	40 V	Luminous Sensitivity (25v) 40 vA/L DC 35 uA/L DC 40 uA/L DC 35 uA/L DC
Luminous Sensitivity ([3]	35 V	Luminous Sensitivity (25v) 40 vA/L DC 35 uA/L DC 40 uA/L DC 35 uA/L DC
Luminous Sensitivity ([4]	40 V	Luminous Sensitivity (25v) 40 vA/L DC 35 uA/L DC 40 uA/L DC 35 uA/L DC
Luminous Sensitivity ([5]	35 V	Luminous Sensitivity (25v) 40 vA/L DC 35 uA/L DC 40 uA/L DC 35 uA/L DC
Gas Amplification [1]	8	Gas Amplification 8 -- - 8 . - -
Gas Amplification [2]	8	Gas Amplification 8 -- - 8 . - -
Temperature, ambient [1]	100 C	Temperature, ambient 100°C 100°C 100°C 100°C
Temperature, ambient [2]	100 C	Temperature, ambient 100°C 100°C 100°C 100°C
Temperature, ambient [3]	100 C	Temperature, ambient 100°C 100°C 100°C 100°C
Temperature, ambient [4]	100 C	Temperature, ambient 100°C 100°C 100°C 100°C