ELECTRONIC TUBE REFERENCE

R61BV

Specialized - Photo Tube electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
PHOTOEMISSIVEDETECTOR

Rugged vacuum blue-sensitive phototube for portable sound-on-film reproduction and industrial optical sensing.

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	500 V

Photoelectric section. Published anode-cathode capacitance approximately 2.0 pF.

A sturdy constructed tube designed to withstand shock We recommend this tube to manufacturers developing new sound heads as the preferred type for use in portable 16 MM sound-on-film The RS8 series is exceptionally dependable when used in in- dustrial electronic control equipment (such as counting, sorting, burglar alarms, This tube is supplied with a five prong octal type base and a TS bulb, dimen. This variant uses the blue-sensitive cathode surface described by the family datasheet. The V variant is the higher-voltage vacuum version listed in the maximum-ratings 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	**500 V**	Variant-specific maximum rating
Anode-Cathode Capacitance	**2 pF**	Variant-specific general characteristic
The R6	**1**	The R61 series is supplied with two types of cathode surfaces,
TYPE R5	**8 V**	TYPE R58 “A" type sensitive to infra-red and “B” type sensitive to blue.
response to red radiation of the R6	**1 V**	response to red radiation of the R61 blue sensitive tube makes it valuable in
Cathode Size [1]	**0**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"
Cathode Size [2]	**1**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"
Cathode Size [3]	**625**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"
Cathode Size [4]	**1**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"
Cathode Size [5]	**625**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"
Cathode Size [6]	**1**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"
Cathode Size [7]	**625**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode Size [8]	**1**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"
Cathode Size [9]	**625**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"
Cathode Size [10]	**1**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"
Cathode Size [11]	**625**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"
Cathode Size [12]	**1**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"
Cathode Size [13]	**625**	Cathode Size .....00.n.. 1.00"” x .625" 1.00" x .625" 1.00"" x .625"" 1.00” x .625" 1.00" x .625" 1.00" x .625"
Capacitance (Anode-Cathode) [1]	**2.5 pF**	Capacitance (Anode-Cathode) ... 2.5 MMF. 2.0 MMF. 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. 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. 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. 2.5 MMF. 2.0 MMF.
Capacitance (Anode-Cathode) [5]	**2.5 pF**	Capacitance (Anode-Cathode) ... 2.5 MMF. 2.0 MMF. 2.5 MMF. 2.0 MMF. 2.5 MMF. 2.0 MMF.
Capacitance (Anode-Cathode) [6]	**2 pF**	Capacitance (Anode-Cathode) ... 2.5 MMF. 2.0 MMF. 2.5 MMF. 2.0 MMF. 2.5 MMF. 2.0 MMF.
Leakage Resistance (Min) [1]	**1000 Mohm**	Leakage Resistance (Min) ..... 1000 Megq. 1000 Meq. 1000 Meg. 1000 Meg. 1000 Meg. 1000 Megq.
Leakage Resistance (Min) [2]	**1000 Mohm**	Leakage Resistance (Min) ..... 1000 Megq. 1000 Meq. 1000 Meg. 1000 Meg. 1000 Meg. 1000 Megq.
Leakage Resistance (Min) [3]	**1000 Mohm**	Leakage Resistance (Min) ..... 1000 Megq. 1000 Meq. 1000 Meg. 1000 Meg. 1000 Meg. 1000 Megq.
Leakage Resistance (Min) [4]	**1000 Mohm**	Leakage Resistance (Min) ..... 1000 Megq. 1000 Meq. 1000 Meg. 1000 Meg. 1000 Meg. 1000 Megq.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Leakage Resistance (Min) [5]	**1000 Mohm**	Leakage Resistance (Min) ..... 1000 Megq. 1000 Meq. 1000 Meg. 1000 Meg. 1000 Meg. 1000 Megq.
Leakage Resistance (Min) [6]	**1000 Mohm**	Leakage Resistance (Min) ..... 1000 Megq. 1000 Meq. 1000 Meg. 1000 Meg. 1000 Meg. 1000 Megq.
Anode Voltage, Peak ..... L' [1]	**500 V**	Anode Voltage, Peak ..... L' 500V 90V 500V 90V 500V
Anode Voltage, Peak ..... L' [2]	**90 V**	Anode Voltage, Peak ..... L' 500V 90V 500V 90V 500V
Anode Voltage, Peak ..... L' [3]	**500 V**	Anode Voltage, Peak ..... L' 500V 90V 500V 90V 500V
Anode Voltage, Peak ..... L' [4]	**90 V**	Anode Voltage, Peak ..... L' 500V 90V 500V 90V 500V
Anode Voltage, Peak ..... L' [5]	**500 V**	Anode Voltage, Peak ..... L' 500V 90V 500V 90V 500V
Luminous Sensitivity [1]	**225 V**	Luminous Sensitivity ..... 225 vA/LDC 40 uA/LDC 225 wA/LDC 40 uA/L DC 250 wA/LDC 45 uA/LDC
Luminous Sensitivity [2]	**40 V**	Luminous Sensitivity ..... 225 vA/LDC 40 uA/LDC 225 wA/LDC 40 uA/L DC 250 wA/LDC 45 uA/LDC
Luminous Sensitivity [3]	**225 V**	Luminous Sensitivity ..... 225 vA/LDC 40 uA/LDC 225 wA/LDC 40 uA/L DC 250 wA/LDC 45 uA/LDC
Luminous Sensitivity [4]	**40 V**	Luminous Sensitivity ..... 225 vA/LDC 40 uA/LDC 225 wA/LDC 40 uA/L DC 250 wA/LDC 45 uA/LDC
Luminous Sensitivity [5]	**250 V**	Luminous Sensitivity ..... 225 vA/LDC 40 uA/LDC 225 wA/LDC 40 uA/L DC 250 wA/LDC 45 uA/LDC
Luminous Sensitivity [6]	**45 V**	Luminous Sensitivity ..... 225 vA/LDC 40 uA/LDC 225 wA/LDC 40 uA/L DC 250 wA/LDC 45 uA/LDC
Gas Amplification [1]	**8**	Gas Amplification ..... 8 .- - 8 .- - 8 ...
Gas Amplification [2]	**8**	Gas Amplification ..... 8 .- - 8 .- - 8 ...
Gas Amplification [3]	**8**	Gas Amplification ..... 8 .- - 8 .- - 8 ...
Temperature, ambient [1]	**100 C**	Temperature, ambient ..... 100°C 100°C 100°C 100°C 100°C 100°C
Temperature, ambient [2]	**100 C**	Temperature, ambient ..... 100°C 100°C 100°C 100°C 100°C 100°C

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Temperature, ambient [3]	**100 C**	Temperature, ambient ..... 100°C 100°C 100°C 100°C 100°C 100°C
Temperature, ambient [4]	**100 C**	Temperature, ambient ..... 100°C 100°C 100°C 100°C 100°C 100°C
Temperature, ambient [5]	**100 C**	Temperature, ambient ..... 100°C 100°C 100°C 100°C 100°C 100°C
Temperature, ambient [6]	**100 C**	Temperature, ambient ..... 100°C 100°C 100°C 100°C 100°C 100°C
c g	**3**	c g 3 DIRECTION OF LIGHT CENTERLINE - o