ELECTRONIC TUBE REFERENCE

6GV8

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
BEAMPOWER-TRIODE

> Combination high-mu triode and beam-power pentode used for television sync-amplifier and video-output applications.

General characteristics

BASE DESIGNATION	9LY	**BASE PINS**	9
NOMINAL HEATER	6.3 V / 900 mA	**PARALLEL HEATER**	— / —
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Dissimilar

9LY - Terminal pinout

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	B	P — Plate (Anode)	CONNECTED
PIN2	B	G1 — Control Grid	CONNECTED
PIN3	B	K — Cathode	CONNECTED
PIN4	—	H — Heater	CONNECTED
PIN5	—	H — Heater	CONNECTED
PIN6	A	P — Plate (Anode)	CONNECTED
PIN7	A	G2 — Screen Grid	CONNECTED
PIN8	A	G3 — Suppressor Grid	CONNECTED
PIN8	A	K — Cathode	CONNECTED
PIN8	—	IS — Internal Screen	CONNECTED
PIN9	A	G1 — Control Grid	CONNECTED

Section ratings

SECTION1 Triode

PLATE RESISTANCE	7600 Ω
TRANSCONDUCTANCE	0.0065 S
AMPLIFICATION FACTOR	50
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	15 mA

Published typical operating conditions, UHF/deflection ratings, and descriptive application reviewed.

SECTION2 Beam Power

TRANSCONDUCTANCE	0.0075 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	7 W
MAXIMUM SCREEN DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	200 mA

Published typical operating conditions, UHF/deflection ratings, and descriptive application reviewed.

High-mu triode plus power pentode used for sync-amplifier and video-output applications in television receivers.

SOURCE OPERATING CONDITIONS

1963 Amperex Condensed

SOURCE PDF

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

1963 AMPEREX CONDENSED

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Heater voltage	**6.3 V**	Published heater rating
Heater current	**900 mA**	Published heater rating
Driver amplification factor	**50**	TriodeSection Driver
Driver plate resistance	**7600 ohm**	TriodeSection Driver

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Driver plate voltage	**100 V**	TriodeSection Driver
Driver control-grid bias	**-0.8 V**	TriodeSection Driver
Driver plate current	**5 mA**	TriodeSection Driver

1963 AMPEREX CONDENSED

Section 2 · Beam Power

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Vertical-output plate voltage	**170 V**	PentodeSection VerticalDeflection
Vertical-output screen voltage	**170 V**	PentodeSection VerticalDeflection
Vertical-output plate current	**41 mA**	PentodeSection VerticalDeflection
Vertical-output screen current	**27 mA**	PentodeSection VerticalDeflection

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Vertical-output amplification factor	**7**	PentodeSection VerticalDeflection
Vertical-output transconductance	**7500 µS**	PentodeSection VerticalDeflection

SOURCE OPERATING CONDITIONS

1975 RCA RC30

SOURCE PDF

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

1975 RCA RC30

Section 1 · Triode

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Heater Voltage (ac/de) 6.3 9.5 11.6	**18 V**	Published in approved ECL85 target datasheet entry; Section1
Heater Current 0.9 0.6 0.45	**300 mA**	Published in approved ECL85 target datasheet entry; Section1
IMate Supply Voltage 550	**550 V**	Published in approved ECL85 target datasheet entry; Section1
Peak Plate Voltage 0	**2000 V**	Published in approved ECL85 target datasheet entry; Section1
DC Plate Voltage 250	**250 V**	Published in approved ECL85 target datasheet entry; Section1
Grid-No.2 (Screen-Grid) Supply Voltage	**550 V**	Published in approved ECL85 target datasheet entry; Section1
Grid-No. 2 Voltage	**250 V**	Published in approved ECL85 target datasheet entry; Section1
Peak Cathode Current"	**200 mA**	Published in approved ECL85 target datasheet entry; Section1
Average Cathode Current 15	**75 mA**	Published in approved ECL85 target datasheet entry; Section1
Plate Dissipation 0.5	**7 W**	Published in approved ECL85 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Crid-No.2 Input	**2 W**	Published in approved ECL85 target datasheet entry; Section1
Plate Voltage 100 50 65	**170 V**	Published in approved ECL85 target datasheet entry; Section1
Grid-No.2 Voltage 170 210	**170 V**	Published in approved ECL85 target datasheet entry; Section1
Grid-No. 1 Voltage —0.8 — —1	**-15 V**	Published in approved ECL85 target datasheet entry; Section1
For fixed-bias operation 1	**1 MΩ**	Published in approved ECL85 target datasheet entry; Section1
For cathode-bias operation 3.3	**2.2 MΩ**	Published in approved ECL85 target datasheet entry; Section1
Maximum pulse duration	**5 %**	Published in approved ECL85 target datasheet entry; Section1
Maximum pulse duration 5 per cent of a cycle with a maximum of	**1 millisecond**	Published in approved ECL85 target datasheet entry; Section1
Maximum pulse duration	**200 microseconds**	Published in approved ECL85 target datasheet entry; Section1
be reduced to 100 mAwith a maximum pulse duration of	**400 microseconds**	Published in approved ECL85 target datasheet entry; Section1

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Appro*.) 7600	**-25000 Ω**	Published in approved ECL85 target datasheet entry; Section1
Transccnductance 6500	**7500 µS**	Published in approved ECL85 target datasheet entry; Section1
Plate Current 5 200" 240	**41 mA**	Published in approved ECL85 target datasheet entry; Section1
Grid-No.2 Current 40« 50*	**2.7 mA**	Published in approved ECL85 target datasheet entry; Section1

1975 RCA RC30

Section 2 · Beam Power

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/de) 6.3 9.5 11.6	**18 V**	Published in approved ECL85 target datasheet entry; Section2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current 0.9 0.6 0.45	**300 mA**	Published in approved ECL85 target datasheet entry; Section2
IMate Supply Voltage 550	**550 V**	Published in approved ECL85 target datasheet entry; Section2
Peak Plate Voltage 0	**2000 V**	Published in approved ECL85 target datasheet entry; Section2
DC Plate Voltage 250	**250 V**	Published in approved ECL85 target datasheet entry; Section2
Grid-No.2 (Screen-Grid) Supply Voltage	**550 V**	Published in approved ECL85 target datasheet entry; Section2
Grid-No. 2 Voltage	**250 V**	Published in approved ECL85 target datasheet entry; Section2
Peak Cathode Current"	**200 mA**	Published in approved ECL85 target datasheet entry; Section2
Average Cathode Current 15	**75 mA**	Published in approved ECL85 target datasheet entry; Section2
Plate Dissipation 0.5	**7 W**	Published in approved ECL85 target datasheet entry; Section2
Crid-No.2 Input	**2 W**	Published in approved ECL85 target datasheet entry; Section2
Plate Voltage 100 50 65	**170 V**	Published in approved ECL85 target datasheet entry; Section2
Grid-No.2 Voltage 170 210	**170 V**	Published in approved ECL85 target datasheet entry; Section2
Grid-No. 1 Voltage −0.8 − −1	**-15 V**	Published in approved ECL85 target datasheet entry; Section2
For fixed-bias operation 1	**1 MΩ**	Published in approved ECL85 target datasheet entry; Section2
For cathode-bias operation 3.3	**2.2 MΩ**	Published in approved ECL85 target datasheet entry; Section2
Maximum pulse duration	**5 %**	Published in approved ECL85 target datasheet entry; Section2
Maximum pulse duration 5 per cent of a cycle with a maximum of	**1 millisecond**	Published in approved ECL85 target datasheet entry; Section2
Maximum pulse duration	**200 microseconds**	Published in approved ECL85 target datasheet entry; Section2
be reduced to 100 mAwith a maximum pulse duration of	**400 microseconds**	Published in approved ECL85 target datasheet entry; Section2

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Plate Resistance (Appro*.) 7600	**-25000 Ω**	Published in approved ECL85 target datasheet entry; Section2
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