



ELECTRONIC TUBE REFERENCE

EF93

Voltage - Pentode Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Indirectly heated variable-slope pentode for gain-controlled RF and IF amplification with high plate resistance.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B7G	BASE PINS	7
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	- / -
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	1450000 Ω
TRANSCONDUCTANCE	0.0044 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	125 V
MAXIMUM PLATE DISSIPATION	3 W
MAXIMUM SCREEN DISSIPATION	0.6 W
MAXIMUM CATHODE CURRENT	18 mA
Published ratings/characteristics promoted from source tables.	

Indirectly heated variable-slope pentode intended for RF or IF amplification.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Mullard

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

1963 MULLARD

Section 1 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	5.5 pF	—
Output capacitance	5 pF	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode current	11 mA	V _a =250V; V _{g2} =100V
Screen current	4.2 mA	V _a =250V; V _{g2} =100V



SOURCE OPERATING CONDITIONS

1968 Mazda Belvu

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

1968 MAZDA BELVU

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tension filAMent cceurecrearssoceresnancomssncacecececececess VÉ	6.3 V	—
Heater current ...s seessencensereneseress IË	300 mA	—
TenSion d'ANOËE.....rrevereesereirr vovrorcamreranséssencecsce0ees VE	300 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen-grid voltage à courant nul assssos0c0s000u VGa DI	125 V	—
Dissipation d'Anod@vsesereersocserensencrmcecesescuess PA	3 W	—
Screen-grid dissipation ... ercrcrenenseceensensensennee PB2	0.6 W	—
VAÏlEur NÉGatiVEmesenente socmerrsenren sessancoencees “ VEL	50 V	—
valeur positive maerseerseessssscasseuseees V1	0 V	—
Tension entre filament et cathode oevsusecessceseeercnes VIR	90 V	—
Tension d'ANOËE ueerseceemsenesecssosecenrensensenceseseense VOL	100250 V	—
Screen-grid voltage usescenemssicssencosusesrsossseccurss V 2R	100 V	—
RÉSISTANCE INTeINE ... uerercercencereerensessersnrencenceaeneen P 0,25	1.5 MΩ	—
PEntE Lrecrirenceseensecasesnsecesmsumemess sasassesssensencenseencansesss 1D 4,3	4.4 mA/V	—
pour une pente de 40 jA/ V . covsossosrseseesencanceuse VB DL	-20 V	—
Courant d'Anod@Eccesreeveeee sorrnsneceseenseeseecnseences T0 10,8	11 mA	—
Courant de grille n° 2 uceesecsesreesecacemcescscercessss 182 4,4	4.2 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Capacitance d'entrée Ce	5.5 pF	InterelectrodeCapacitance
Capacitance de sortie ... avssesnensesscamsencasasasecermaenceusss OS	5 pF	InterelectrodeCapacitance
Capacitance grille n° 1/anode vouene cacvse vocacarassensvencn es CE1/@	3.5 pF	InterelectrodeCapacitance

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1975 RCA RC30

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

1975 RCA RC30

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
For fixed-bias operation	0.25 MΩ	Published in approved EF93 target datasheet entry; Section1
For cathode-bias operation	1 MΩ	Published in approved EF93 target datasheet entry; Section1
Plate Current	5 mA	Published in approved EF93 target datasheet entry; Section1
Plate Voltage	330 V	Published in approved EF93 target datasheet entry; Section1
Grid-No.3 (Suppressor-Grid) Voltage, Positive value	0 V	Published in approved EF93 target datasheet entry; Section1
Grid-No.2 Supply Voltage	330 V	Published in approved EF93 target datasheet entry; Section1
Plate Dissipation	3.4 W	Published in approved EF93 target datasheet entry; Section1
For grid-No.2 voltages up to	165 V	Published in approved EF93 target datasheet entry; Section1
For grid-No.2 voltages up to 165 volts	0.7 W	Published in approved EF93 target datasheet entry; Section1
For grid-No.2 voltages between 165 and	330 V	Published in approved EF93 target datasheet entry; Section1
Negative-bias value	55 V	Published in approved EF93 target datasheet entry; Section1
Positive-bias value	0 V	Published in approved EF93 target datasheet entry; Section1
Plate Supply Voltage 100	250 V	Published in approved EF93 target datasheet entry; Section1
voltage of approximately	50 V	Published in approved EF93 target datasheet entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube Voltage Drop for plate current of	20 mA	Published in approved EF93 target datasheet entry; Section1
Tube Voltage Drop for plate current of 20 mA	5 V	Published in approved EF93 target datasheet entry; Section1
Grid-No.2 Supply Voltage 100	100 V	Published in approved EF93 target datasheet entry; Section1
Cathode-Bias Resistor 68	68 Ω	Published in approved EF93 target datasheet entry; Section1
Plate Resistance (Approx.) 0.25	1 MΩ	Published in approved EF93 target datasheet entry; Section1
Transconductance 4300	4400 μS	Published in approved EF93 target datasheet entry; Section1
Plate Current 10.8	11 mA	Published in approved EF93 target datasheet entry; Section1
Grid-No.2 Current 4.4	4.2 mA	Published in approved EF93 target datasheet entry; Section1
of 40 jimhos	-20 V	Published in approved EF93 target datasheet entry; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc) 6.3	6.3 V	Published in approved EF93 target datasheet entry; Section1
Heater Current 0.3	300 mA	Published in approved EF93 target datasheet entry; Section1
" This value is	5.5 pF	Published in approved EF93 target datasheet entry; Section1

TUBE TINKER

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

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker