



ELECTRONIC TUBE REFERENCE

EY81

Rectifier - Damper Diode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

RECTIFIER

High-voltage damper diode for television horizontal-output circuits, rated around 5.6 kV peak inverse voltage and 150 mA average current for repetitive line-deflection recovery.

GENERAL CHARACTERISTICS

BASE DESIGNATION	Noval	BASE PINS	9
NOMINAL HEATER	6.3 V / 810 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	3.5 W
MAXIMUM CATHODE CURRENT	150 mA
PEAK INVERSE VOLTAGE	5600 V
NOMINAL OUTPUT CURRENT	150 mA
PEAK FORWARD CURRENT	450 mA
<i>Published ratings/characteristics promoted where clearly stated; repeated identical rectifier sections compressed to one section row.</i>	

Damper diode for television horizontal-output circuits, with a 5.6 kV peak-inverse-voltage rating.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1953 La Radiotechnique

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

1953 LA RADIOTECHNIQUE

Section 1 · Rectifier

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published nominal value
Heater current	810 mA	Published nominal value

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode capacitance	6.4 pF	Published
Cathode-heater capacitance	2.5 pF	Published



SOURCE OPERATING CONDITIONS

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1953 RFT Rundfunk Technik

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

1953 RFT RUNDFUNK TECHNIK

Section 1 · Rectifier

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Inverse plate voltage maximum	4.5 kV	—
DC plate current maximum	150 mA	—
Peak plate current maximum	450 mA	—
Duty ratio maximum	1:5.5	—
Pulse duration maximum	18 μs	—



SOURCE OPERATING CONDITIONS

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1963 Amprex Condensed

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

1963 AMPEREX CONDENSED

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse voltage maximum	5600 V	DamperDiode
Peak plate current maximum	450 mA	DamperDiode
Average plate current maximum	150 mA	DamperDiode
Application	Damper diode in horizontal output circuits of television receivers Section1	



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V1a

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V1A

Section 1 · Rectifier

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode capacitance	6.4 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode-to-heater capacitance	2.5 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum booster voltage	550 V	—
Maximum DC anode current	150 mA	—
Maximum peak anode current	450 mA	—
Maximum cathode-positive anode-cathode pulse voltage	5000 V	Pulse
Maximum heater-cathode pulse voltage	5000 V	Pulse


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1972 Philips Receiving Tubes

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

1972 PHILIPS RECEIVING TUBES

Section 1 · Rectifier

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published nominal value
Heater current	810 mA	Published nominal value


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips E-Z

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

1999 PHILIPS E-Z

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical datum	6.3 V	Heating : indirect; parallel supply $V_e = 6,3 \text{ V}$
Published electrical datum	810 mA	Chauffage: indirect; alimentation parallèle $I_p = 810 \text{ mA}$
Published electrical datum	6.4 pF	Capacitances $C_a = 6,4 \text{ pF}$
Published electrical datum	2.5 pF	Kapaziteiten $C_{uf} = 2,5 \text{ pF}$
Published electrical datum	450 mA	$I_{ap} = \text{max}, 450 \text{ mA}$
Published electrical datum	5600 v	$V_{ak}, = \text{mex. } 5600 \text{ v}(\%)?)$
Published electrical datum	3800 v	$V_{az}, = \text{maz.}, 3800 \text{ v}(\%)6)$
Published electrical datum	810 mA	Chauffage: indirect; alimentation parallèle $I_r = 810 \text{ mA}$
Published electrical datum	6.4 pF	Capacitances $C_a = 6,4 \text{ pF}$
Published electrical datum	—	) Maxé pulse duration 22 % of a cycle with a maximum of
Published electrical datum	—	0 5 10 5 20 $V_a(V)$ 25

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical datum	4 μF	Chew at = max. 4 uF
Published electrical datum	600 V	$V_{it} \text{ max. } 600 \text{ V}')$
Published electrical datum	5000 V	$V_{ai}, = \text{max.}, 5000 \text{ V}?) [\text{e—}$
Published electrical datum	3000 V	$V_{az}, = \text{max. } 3000 \text{ V}(\%)$
Published electrical datum	250 V	$V_p = \text{max. } 250 \text{ V}$
Published electrical datum	3.5 W	$W_a = \text{max. } 3,5 \text{ W}$
Published electrical datum	150 mA	$I_a = \text{max. } 150 \text{ mA}$
Published electrical datum	450 mA	$I_{ap} = \text{max. } 450 \text{ mA}$
Published electrical datum	5000 V	$V_{akp} = \text{max. } 5000 \text{ V }')2\%)$
Published electrical datum	5000 V	$V_{erp} = \text{max. } 5000 \text{ V }')$
Published electrical datum	—	v entre filament et terre = max. 220
Published electrical datum	3.5 W	$W_a = M_{\text{max.}} 3,5 \text{ W}$
Published electrical datum	5000 v	$V_{akp} = \text{max. } 5000 \text{ v }1)?)$
Published electrical datum	5600 v	$V_{akp} = \text{max. } 5600 \text{ v }')2)3)$
Published electrical datum	5000 V	$V_{ifp} = \text{max. } 5000 \text{ V }')$

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical datum	—	v entre filament et terre = max. 220 Verr
Published electrical datum	—	2)Max. pulse duration 22% of a cycle with a maximum of
Published electrical datum	—	) Ma;;é pulse duration 22 % of a cycle with a maximum of
Heater voltage	6.3 V	Nominal heater rating
Heater current	810 mA	Nominal heater rating

TUBE TINKER

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

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