

ELECTRONIC TUBE REFERENCE

12AX4GTB

Rectifier - Damper Diode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

High-voltage television horizontal-deflection damper diode with approximately 5 kV peak-inverse capability, high pulse current, and controlled heater warm-up.

GENERAL CHARACTERISTICS

BASE DESIGNATION	4CG	BASE PINS	8
NOMINAL HEATER	12.6 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

4CG - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – IC	–	–	IC
PIN2 – IC	–	–	IC
PIN3 – K	A	K – Cathode	CONNECTED
PIN5 – P	A	P – Plate (Anode)	CONNECTED
PIN7 – H	–	H – Heater	CONNECTED
PIN8 – H	–	H – Heater	CONNECTED

SECTION RATINGS

SECTION1 Rectifier	
MAXIMUM PLATE DISSIPATION	5.3 W
PEAK INVERSE VOLTAGE	5000 V
NOMINAL OUTPUT CURRENT	165 mA
PEAK FORWARD CURRENT	1 A
FORWARD VOLTAGE DROP	32 V
MAXIMUM HEATER-CATHODE VOLTAGE	5000 V
WARM-UP TIME	11 s
<i>Damper rectifier; voltage drop specified at 250 mA.</i>	

High-voltage damper diode for television horizontal-deflection service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Tung Sol

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

1961 TUNG SOL

Section 1 · Rectifier

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Service	Television damper diode	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 2 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 1 · Rectifier

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse plate voltage	5000 V	TVDamperService
Plate dissipation	5.3 W	TVDamperService
Steady state peak plate current	1000 mA	TVDamperService
DC output current	165 mA	TVDamperService
Heater warm-up time	11 s	—

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube voltage drop at 250 mA	32 V	TVDamperService

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode-to-plate-and-heater capacitance	8.5 pF	—
Plate-to-cathode-and-heater capacitance	5 pF	—
Heater-to-cathode capacitance	4 pF	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 5 of 7

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

1971 RCA HB3 BINDER 5 OF 7

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse plate voltage	5000 V	DamperService
Peak plate current	1000 mA	DamperService
DC plate current	165 mA	DamperService
Plate dissipation	5.3 W	DamperService

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube voltage drop at 250 mA	32 V	DamperService
Heater voltage nominal	12.6 V	—
Heater current	600 mA	—
Heater warm-up time	11 s	Average



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 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc)	16.8	Published value from supplied target entry
Heater Current	0.45 amperes	Published value from supplied target entry
Heater Warm-up Time (Average)	11 seconds	Published value from supplied target entry
Peak Inverse Plate Voltage#	5000 volts	Published value from supplied target entry
Peak Plate Current	1000 mA	Published value from supplied target entry
Average Plate Current	165 mA	Published value from supplied target entry
Plate Dissipation	5.3 watts	Published value from supplied target entry
Tube Voltage Drop for plate current of	32 mA	Published value from supplied target entry
Peak Inverse Plate Voltage	1250 volts	Published value from supplied target entry
Peak Plate Current (Per Plate)	375 mA	Published value from supplied target entry
Peak Heater-Cathode Voltage ±	450 volts	Published value from supplied target entry
AC Plate-to-PIate Supply Voltage (rms)	900 volts	Published value from supplied target entry
i,,,j current	395 mA	Published value from supplied target entry
Half-load to full-load current	50 volts	Published value from supplied target entry
AC Plate-to-Plate Supply Voltage (rms)	900 volts	Published value from supplied target entry
a* u ,,j current, ofr	270 mA	Published value from supplied target entry

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode to Plate and Heater	8.5 pF	Published value from supplied target entry
Plate to Cathode and Heater	5 pF	Published value from supplied target entry
Heater to Cathode	4 pF	Published value from supplied target entry

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filter Input Capacitor'	10	Published value from supplied target entry

TUBE TINKER

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and their source documents.

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