



ELECTRONIC TUBE REFERENCE

5560

Specialized - Thyatron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

THYRATRON

Four-electrode mercury-vapor thyatron with negative-control characteristics for high-impedance, low-grid-power control sources and substantial industrial switching.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	5 V / 4.5 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Thyatron	
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM CATHODE CURRENT	2.5 A
<i>Published maximum ratings and device-specific characteristics are promoted where schema-compatible; remaining switching/gauge/regulator electrical data is retained in section parameters.</i>	

Four-electrode mercury-vapor thyatron with negative-control characteristics for high-impedance, low-grid-power control sources.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Amperex Industrial

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

1958 AMPEREX INDUSTRIAL

Section 1 · Thyatron

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament heating time	300 s	—
Tube voltage drop	16 V	—
Ionization time	10 μ s	—
Deionization time	1000 μ s	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak forward anode voltage	1000 V	—
Peak inverse anode voltage	1000 V	—
Peak anode current	15 A	—
Average anode current	2.5 A	—
Maximum grid voltage	-1000 V	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Amperex Condensed

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

1963 AMPEREX CONDENSED

Section 1 · Thyatron

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament heating time	300 s	MercuryVaporThyatron

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube voltage drop	16 V	MercuryVaporThyratron
Ionization time	10 μ s	MercuryVaporThyratron
Deionization time	1000 μ s	MercuryVaporThyratron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak forward voltage maximum	1000 V	MercuryVaporThyratron
Peak inverse voltage maximum	1000 V	MercuryVaporThyratron
Peak anode current maximum	15 A	MercuryVaporThyratron
Average anode current maximum	2.5 A	MercuryVaporThyratron
Maximum grid voltage	-1000 V	MercuryVaporThyratron
Recommended mercury temperature range	+40 to +80 $^{\circ}$ C	MercuryVaporThyratron



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 2 of 7

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

1971 RCA HB3 BINDER 2 OF 7

Section 1 · Thyratron

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage – published value 1	5.5 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Voltage – published value 2	5 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Current – published value 1	5 A	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Current – published value 2	4.5 A	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ionization time (Approx.)	10 s	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Deionization Time (Approx.) 1000	1000 s	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Anode Voltage Drop (Approx.)	16 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Grid-No.1 Control Ratio (ApProx.) with grid-No.i	1	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
resistor (ohms) - 0; grid- rNao and grid-No.2 volts = 0 – published value 1	0 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
resistor (ohms) - 0; grid- rNao and grid-No.2 volts = 0 – published value 2	2 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
resistor (ohms) - 0; grid- rNao and grid-No.2 volts = 0 – published value 3	0 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
resistor (ohms) - 0; grid- rNao and grid-No.2 volts = 0 – published value 4	170 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Grid-No.2 Control Ratio (ApProx.) with grid No. 1	2	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
resistor lofmsl = 0;. grid- NN-o I and grid-No.2 volts - 0 – published value 1	0 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
resistor lofmsl = 0;. grid- NN-o I and grid-No.2 volts - 0 – published value 2	2 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
resistor lofmsl = 0;. grid- NN-o I and grid-No.2 volts - 0 – published value 3	0 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
resistor lofmsl = 0;. grid- NN-o I and grid-No.2 volts - 0 – published value 4	300 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
GRID-No.2 (SHIELD-GRID) VOLTAGE	2 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GRID-No.2 CURRENT	2	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
COND. -MERCURY TEMPERATURE RANGE	402	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
TEMPERATURE-RISE CHARACTERISTIC of the 5560	5560	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
C~ = 5 VOLT 5 AC f S'4: GRID-Nt 2 (911ELD} – published value 1	5 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
C~ = 5 VOLT 5 AC f S'4: GRID-Nt 2 (911ELD} – published value 2	4 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
C~ = 5 VOLT 5 AC f S'4: GRID-Nt 2 (911ELD} – published value 3	2 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
C~ = 5 VOLT 5 AC f S'4: GRID-Nt 2 (911ELD} – published value 4	911 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
VOLT4= 0: CIRCUIT RETURNS TO PIN N%	0 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
GRID-Nf I RESISTdi (OHMS)=0	0 ohm	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
COND. -MERCURY TEMPERATURE=40Y	40	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
DC GRID-!R 1 VOLTS	1 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
TYPE SSB0	5 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
GRq-N% I RESISTOR (OHMS) = 0	0 ohm	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
DC GRID-Nf 1 VOLTS	1 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GRID-N>r1 RESISTOR (ONMS)=0	0	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
VOLTS=10d	10 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
DC GRID -N><1 VOLTS	1 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
GRID-Nf2 (SNIELD) VOLTS=0	30 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
GRID-Na1 RESISTOR (OHMS)=0	0 ohm	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
DC ANODE AMP.=1.25	1.25 A	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Heater or filament voltage nominal	5 V	Nominal value from supplied datasheet.
Heater or filament current nominal	4.5 A	Nominal or average value from supplied datasheet.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Forward	1000 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Inverse	1000 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Before Conduction	-300 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
During Conduction	-5 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Before Conduction	-1000 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
During Conduction	-10 V	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak – published value 1	30 mA	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Peak – published value 2	15 mA	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Average" – published value 1	0 mA	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Average" – published value 2	5 mA	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Average" – published value 3	2.5 mA	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Fault, for 0.1 sec – published value 1	0.1 mA	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Fault, for 0.1 sec – published value 2	200 mA	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
Average"	0.25 mA	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.
OPERATING FREQUENCY	150 mA	Published datasheet value; multiple values on one row represent separate limits, service ratings, or operating conditions.