632-B
MERCURY-VAPOR THYRATRON

NEGATIVE-CONTROL TETRODE TYPE

GENERAL DATA

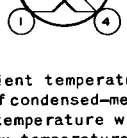
Electrical:

Heater, for Unipotential Cathode:		
Voltage	5•	ac or dc volts
Current	5	amp
Cathode:		
Minimum heating time prior to tube conduction	5	minutes
Direct Interelectrode Capacitances (Approx.):		
Grid No.1 to anode	0.04	μμf
Grid No.2 to anode	3	μμf
Ionization Time (Approx.)	10	μsec
Deionization Time (Approx.)	1000	μsec
Maximum Critical Grid-No.1 Current	2	μamp
Anode Voltage Drop (Approx.)	12	volts

Mechanical:

Mounting Position	Vertical, base down
Maximum Overall Length	8-5/16"
Seated Length	7-1/2" ± 1/4"
Maximum Radius (Including side cap)	1-3/4"
Weight (Approx.)	9 oz
Bulb	T-18
Top Cap	Skirted Medium (JETEC No.C1-29)
Side Cap	Saddle Medium
Base	Skirted-Medium-Shell Small 4-Pin with Bayonet (JETEC No.A4-71)
Basing Designation for BOTTOM VIEW	4CD

Pin 1 – Heater
Pin 2 – Cathode, Circuit Returns
Pin 3 – Grid No.2



Pin 4 – Heater, Cathode
Top Cap – Anode
Side Cap – Grid No.1

Temperature Control:

Heating--When the ambient temperature is so low that the normal rise of condensed-mercury temperature above the ambient temperature will not bring the condensed-mercury temperature up to the minimum value of the operating range specified under ***Maximum Ratings***, some form of heat-conserving enclosure or auxiliary heater will be required.

Cooling--When the operating conditions are such that the maximum value of the operating condensed-mercury temperature is exceeded, provision should be made for forced-air cooling sufficient to prevent exceeding the maximum value.

• Under operating conditions where the average anode current does not exceed 0.5 ampere, the heater voltage may be increased to 5.5 volts.

TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA

RCA

632-B

MERCURY-VAPOR THYRATRON

IGNITOR-FIRING AND GRID-CONTROLLED RECTIFIER SERVICE

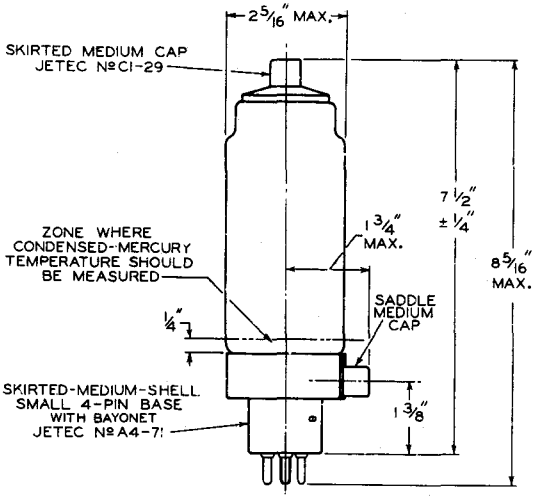
Maximum Ratings, *Absolute Values:*

For anode-supply frequency of 60 cps

	Operating Condensed-Mercury Temperature Range 40° to 80°C■	
PEAK ANODE VOLTAGE:		
Forward	1500 max.	volts
Inverse	1500 max.	volts
GRID-No.2 (SHIELD-GRID) VOLTAGE:		
Peak, before tube conduction	−300 max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Peak, before tube conduction	−1000 max.	volts
CATHODE CURRENT:		
Peak	30 max.	amp
Average#	2.5 max.	amp
Fault, for duration of 0.1 second max.	150 max.	amp
AVERAGE GRID-No.2 CURRENT#	+0.25 max.	amp
AVERAGE GRID-No.1 CURRENT#	+0.25 max.	amp

■ Recommended temperature range of condensed mercury is 45° to 50°C.

Averaged over any interval of 30 seconds maximum.



TENTATIVE DATA

TUBE DIVISION
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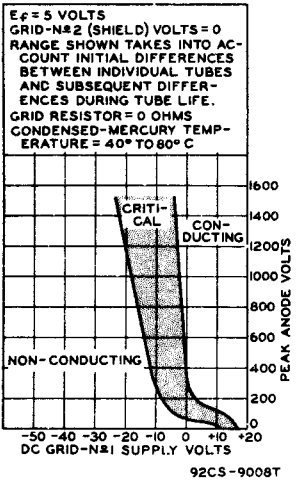
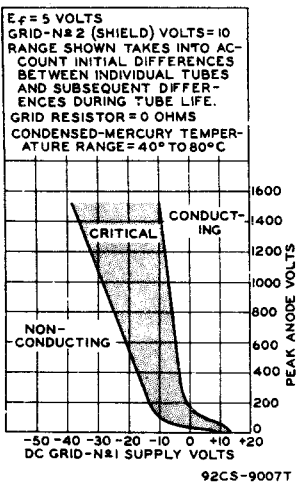
632-B

MERCURY-VAPOR THYRATRON

OPERATIONAL RANGES OF CRITICAL GRID-No.1 VOLTAGE





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