



3C23

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GAS-AND-MERCURY-VAPOR THYRATRON

NEGATIVE-CONTROL TRIODE TYPE

GENERAL DATA**Electrical:**

Filament, Coated:

Voltage $2.5 \pm 5\%$ ac or dc volts ←

Current at 2.5 volts. 7 amp

Minimum heating time prior to
tube conduction 15 secDirect Interelectrode Capacitance (Approx.):^oGrid to anode 1.8 μf ←

Ionization Time (Approx.):

For conditions: dc anode volts = 100,
peak grid volts = +30, and peak
anode amperes = 6 3 μsec ←

Deionization Time (Approx.):

For conditions: dc anode volts = 120,
dc grid-supply volts = -20, grid re-
sistor (ohms) = 10000, and dc
anode amperes = 1.5 360 μsec ←For conditions: dc anode volts = 120,
dc grid-supply volts = -500, grid re-
sistor (ohms) = 100000, and dc
anode amperes = 1.5 60 μsec

Anode Voltage Drop (Approx.). 15 volts

Mechanical:

Mounting Position Vertical, base down

Maximum Overall Length. 6-1/8"

Seated Length 5-1/4" $\pm 1/4$ "

Maximum Diameter 2-1/16"

Cooling Natural circulation of air around tube

Weight (Approx.) 3 oz

Bulb. ST-16 ←

Cap. Medium (JETEC No. C1-5) ←

Base. Medium-Shell Small 4-Pin ←

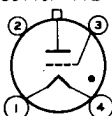
with Bayonet (JETEC No. A4-10)

Basing Designation for BOTTOM VIEW 3G ←

Pin 1-Filament

Pin 2-No Connec-
tion

Pin 3-Grid



Pin 4-Filament

Cap-Anode

CONTROL SERVICE**Maximum Ratings, Absolute Values:** For supply frequency up to 400 cpsOperating Condensed-Mercury
Temperature Range -40° to $+100^{\circ}\text{C}$ -40° to $+80^{\circ}\text{C}$ **PEAK ANODE VOLTAGE:**Forward 200 max. 1250 max. volts
Inverse 200 max. 1250 max. volts^o without external shield.

← Indicates a change.



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Operating Condensed-Mercury
Temperature Range
-40° to +100°C -40° to +80°C

GRID VOLTAGE:

Peak or DC, before

tube conduction -500 max. -500 max. volts

Average[▲], during

tube conduction -10 max. -10 max. volts

ANODE CURRENT:

Peak 6 max. 6 max. amp

Average[●] 1.5 max. 1.5 max. amp

Fault, for duration of

0.1 second max. 120 max. 120 max. amp

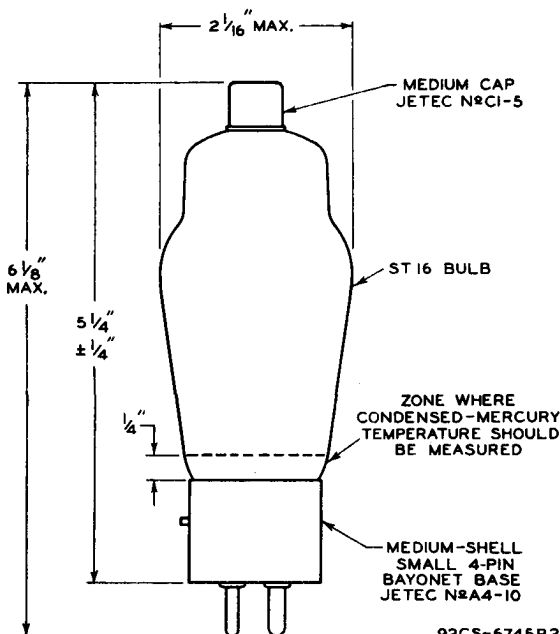
GRID CURRENT:

Average[▲] +0.01 max. +0.01 max. amp

▲ Averaged over one conducting period.

● Averaged over any interval of 5 seconds maximum.

▲ Averaged over period of grid conduction.



92CS-6745R2



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GAS - AND - MERCURY-VAPOR THYRATRON

OPERATIONAL RANGE
OF CRITICAL GRID VOLTAGE

RANGE IS FOR CONDITIONS WHERE:
 $E_f = 2.5$ VOLTS AC $\pm 5\%$; CIRCUIT RE-
TURNS TO CENTER TAP OF FILAMENT
TRANSFORMER. THE RANGE INCLUDES
INITIAL AND LIFE VARIATIONS OF IN-
DIVIDUAL TUBES. GRID RESISTOR = 0
TO 100000 OHMS. CONDENSED-MERCURY
TEMPERATURE = -40°C TO $+80^\circ\text{C}$.

