Gas and Mercury-Vapor Thyratron

NEGATIVE-CONTROL TRIODE TYPE

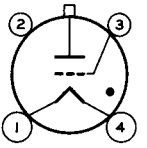
GENERAL DATA

Electrical:[a]

Filament, Coated:		
Voltage (AC or DC)	2.5	volts
Current at 2.5 volts	5.0 ± 0.5	amp
Minimum heating time prior to tube conduction	5	sec
Direct Interelectrode Capacitance (Approx.):[b]		
Grid to anode	2	μμf
Ionization Time (Approx.)	10	μsec
Deionization Time (Approx.)	1000	μsec
Maximum Critical Grid Current	5	μa
Peak Tube Voltage Drop at anode amperes = 3	15	volts

Mechanical:

Operating Position	Vertical, base down
Maximum Overall Length	6-1/8"
Maximum Diameter	2-1/16"
Weight (Approx.)	3 oz
Bulb	ST16
Cap	Medium (JEDEC No.C1-5)
Socket	Small 4-Contact
Base	Medium-Shell Small 4-Pin with Bayonet (JEDEC No.A4-10)
Basing Designation for BOTTOM VIEW	3G



Pin 1 – Filament
Pin 2 – No Internal Connection
Pin 3 – Grid
Pin 4 – Filament
Cap – Anode

Thermal:

Type of Cooling	Convection	
Temperature Rise of Condensed Mercury to Equilibrium Above Ambient Temperature (Approx.)	15	°C

GRID-CONTROLLED-RECTIFIER SERVICE[a]

Maximum and Minimum Ratings, *Absolute-Maximum Values:*

For anode-supply frequency of 60 cps

PEAK ANODE VOLTAGE:		
Forward	1250 max.	volts
Inverse	1250 max.	volts
PEAK NEGATIVE GRID VOLTAGE:		
Before tube conduction	500 max.	volts
During tube conduction	10 max.	volts

ANODE CURRENT:		
Peak	3 max.	amp
Average[c]	1 max.	amp
Fault	50 max.	amp
CONDENSED-MERCURY TEMPERATURE		
RANGE (Operating)[d]	-40 to +80	°C

[a] With circuit returns to filament-transformer center-tap.

[b] Without external shield.

[c] Averaged over any interval of 5 seconds maximum.

[d] For longest life, the operating condensed-mercury temperature range after warm-up should be kept between +40° and +80° C which corresponds approximately to +10° to +50° C ambient.