Half-Wave Mercury-Vapor Rectifier

GENERAL DATA

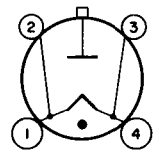
Electrical:[a]

Filament, Coated:		
Voltage (AC)	2.5	volts
Current at 2.5 volts	7 ± 1	amp
Minimum heating time prior to tube conduction	20	sec
Typical Anode Starting Voltage	13	volts
Peak Tube Voltage Drop at anode amperes = 8	12	volts

Mechanical:

Operating Position	Vertical, base down
Maximum Overall Length	6-3/8"
Maximum Diameter	2-1/16"
Weight (Approx.)	4 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	4AU

Pin 1 – Filament
Pin 2 – Filament
Pin 3 – Filament



Pin 4 – Filament
Cap – Anode

Thermal:

Type of Cooling	Convection	
Temperature Rise of Condensed Mercury to Equilibrium Above Ambient Temperature (Approx.)	30	°C

HALF-WAVE RECTIFIER[a]

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

For power-supply frequency of 60 cps

PEAK INVERSE ANODE VOLTAGE	2000 max.	volts
ANODE CURRENT:		
Peak	10 max.	amp
Average[b]	2.5 max.	amp
Fault	250 max.	amp
CONDENSED-MERCURY TEMPERATURE RANGE (Operating)	+35 to +80	°C

[a] With circuit returns to filament-transformer center-tap.
[b] Averaged over any interval of 5 seconds maximum.