



Air-Blast-Cooled U.H.F. Triode

3J/160E

CATHODE

Thoriated tungsten filament

Voltage	10	V
Nominal current	29	A
Peak emission	10	A

RATING

Amplification factor	$\left\{ \begin{array}{l} \text{Measured at} \\ \text{Va 2.5 kV. Ia 0.8A} \end{array} \right\}$	19	
Impedance		1,300	Ω —

DIRECT INTERELECTRODE CAPACITIES

Grid to anode	8.8	pF
Grid to filament	12	pF
Anode to filament	0.7	pF

AIR COOLING. For 1 kW. anode dissipation

Volume of air at pressure of 2in. of water	80	cu. ft./min.
Maximum temperature of radiator core	150°	C.

DIMENSIONS

Maximum overall length	133	mm.
Maximum diameter over cooler	65	mm.

MAXIMUM RATINGS

Maximum direct anode voltage	3	kV
Maximum anode dissipation	1	kW
Maximum frequency for above ratings	120	Mc/s

Air-Blast-Cooled U.H.F. Triode



3J/160E

TYPICAL OPERATING CONDITIONS RADIO FREQUENCY

Class B Telephony. Modulated carrier applied to grid.

(Carrier conditions per valve for use with 100% modulation)

Direct anode voltage	2	kV
Grid bias	—100	V
Direct anode current	0.7	A
Peak R.F. grid voltage at crest of modulation cycle	320	V
Power output	0.45	kW

Class C Power Amplifier. Anode subject to modulation.

(Carrier conditions per valve for use with 100% modulation).

Direct anode voltage	2	kV
Grid bias	—400	V
Direct anode current	0.75	A
Peak R.F. grid voltage	660	V
*Direct grid current	0.225	A approx.
Power output	1.0	kW

Class C Power Amplifier or Oscillator, unmodulated.

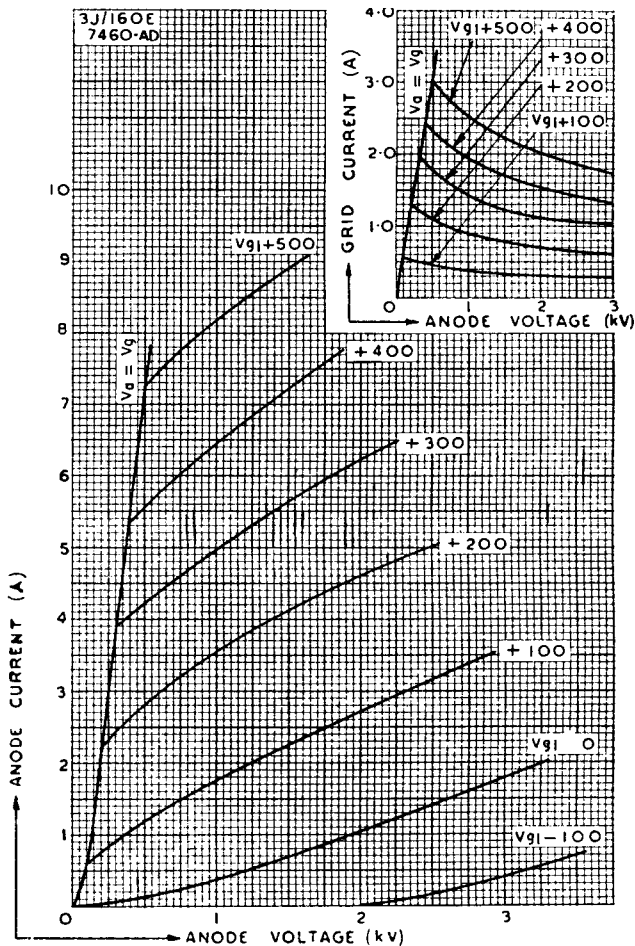
Direct anode voltage	3	kV
Grid bias	—325	V
Direct anode current	1	A
Peak R.F. grid voltage	600	V
*Direct grid current	0.26	A approx.
Power output	2.15	kW

* Subject to wide variation depending upon the impedance of the load circuit.



Air-Blast-Cooled U.H.F. Triode

3J/160E



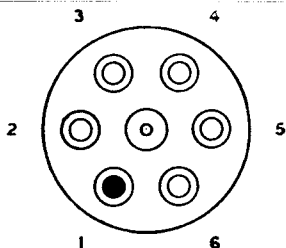
Tentative data
July 1947

3J/160E

Air-Blast-Cooled U.H.F. Triode

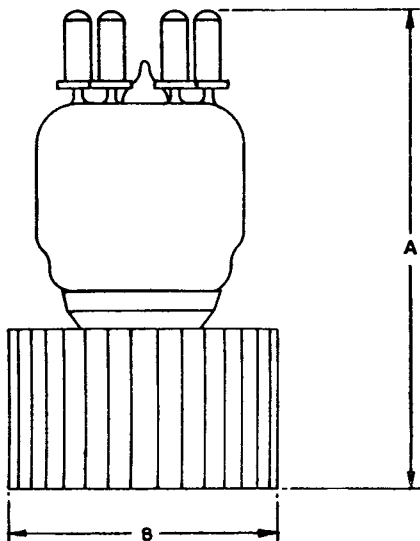


3J/160E



BASING

- 1 FILAMENT C.T.
(RED TIP)
- 2 GRID
- 3 FILAMENT
- 4 GRID
- 5 FILAMENT
- 6 GRID



DIM	MILLIMETRES	INCHES
A	133 MAX	5.2 MAX
B	65 MAX	2.6 MAX

NOTE BASIC FIGURES ARE MILLIMETRES

Tentative data
July 1947

3J/160E-4