

BRIMAR VALVES

TYPE **6060**

DATE **2.3.51.**
ISSUED

R.M.A. REGISTRATION DATA

6060 DOUBLE TRIODE

The 6060 is a miniature type double triode employing the 9 pin glass button base, having the same general characteristics as the 12AT7, and as a frequency changer, operating at frequencies up to 500 Mc/s. Type 6060 is designed for trustworthy operation under adverse conditions of vibration and mechanical shock.

MECHANICAL DATA

Coated unipotential cathode.

Outline drawing	6-2	Bulb	T-6 $\frac{1}{2}$
Base	E9-1	Small glass button	9-pin.
Maximum diameter			7/8"
Maximum overall length			2.3/16"
Maximum seated height			1.15/16"
Pin connections		Basing number	9A

Pin 1 - Anode (No. 2)	Pin 6 - Anode (No. 1)
Pin 2 - Grid (No. 2)	Pin 7 - Grid (No. 1)
Pin 3 - Cathode (No. 2)	Pin 8 - Cathode (No. 1)
Pin 4 - Heater	Pin 9 - Heater centre tap
Pin 5 - Heater	

Mounting position	any
Maximum shock (in intermittent service)	500 g
Vibration (continuous service)	2 $\frac{1}{2}$ g
Mechanical resonance	None below 100 c/s

ELECTRICAL DATA

Direct interelectrode capacitances

Anode 1 to Grid 1	1.6 pF
Anode 2 to Grid 2	1.6 pF
Input 1	2.25 pF
Input 2	2.25 pF
Output 1	0.4 pF
Output 2	0.4 pF
Anode 1 to Anode 2	0.2 pF

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Ratings

Heater voltage (ac or dc)	12.6/6.3 volts
Maximum negative dc grid voltage	-50 volts
Maximum heater-cathode voltage	90 volts
Maximum anode voltage	350 volts
Maximum anode dissipation	2.5 watts

Typical operating conditions and characteristics, class A₁ amplifier

(each section)

Heater voltage (both sections) (ac or dc)	12.6/6.3	12.6/6.3	12.6/6.3 volts
Heater current	0.15/0.3	0.15/0.3	0.15/0.3 amp
Anode voltage	100	180	250 volts
Anode current	3.7	11.0	10.0 mA
Grid voltage	-1	-1	-2 volts
Anode impedance	13,500	9,400	10,000 ohms
Mutual conductance	4.0	6.6	5.5 mA/V
Amplification factor	54	62	55
Grid voltage	-6	-8	-12 volts

(for anode current cut-off)

Operation as a frequency changerOscillator section

Anode supply voltage	250 volts
Anode de-coupling resistor	1,000 ohms
Grid resistor	10,000 ohms

Mixer section

Anode supply voltage	250 volts
Anode de-coupling resistor	1,000 ohms
Cathode bias resistor	2,000 ohms
Conversion conductance [‡]	2.0 mA/V
Heterodyne voltage ^{‡‡}	(See note)

[‡] Exact value depends on circuit constants and input impedance considerations.

^{‡‡} Heterodyne voltage should be sufficient to just cause grid current in the mixer section.