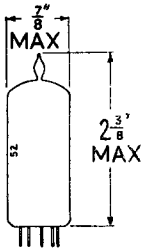
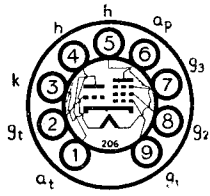
ECL80/6AB8



Replacement Type

TYPE **ECL80/6AB8**
MINIATURE
TRIODE PENTODE



The BRIMAR ECL80/6AB8 is a triode pentode with a common cathode designed for use in the frame time base circuits of television receivers. The triode may be used as frame blocking oscillator and the pentode in the frame output stage. The triode may also be used as a line time base generator or an A.F. voltage amplifier and the pentode as a sync. separator or an audio output valve. It is suitable for use in A.C. or A.C./D.C. receivers.

RATINGS

Heater Voltage	6.3 volts	Heater Current	0.3 amp
Heater Cathode potential	150 volts max.	Heater-Cathode resistor	20 k ohms max.

	Triode	*Pentode*
Anode Voltage (I_a=0) ...	550	550 volts max.
Anode Voltage (Peak)	—	1,200 volts max.
Anode Voltage	200	400 volts max.
Screen Voltage (Ig_2=0)	—	550 volts max.
Screen Voltage	—	250 volts max.
Anode Dissipation ...	1.0	3.5 watts max.
Screen Dissipation ...	—	1.2 watts max.
Cathode Current ...	8	25 mA max.
Peak Cathode Current * ...	200	350 mA max.
Grid Resistor (I_{kp}=12 mA) (Frame output stage) ...	3.0	2.2 MΩ max.
(I_{kp}=20 mA) (Audio output stage) ...	—	1.0 MΩ max.

* *Maximum pulse duration of 10% of one cycle, with a maximum of 2m. secs.*

CHARACTERISTICS

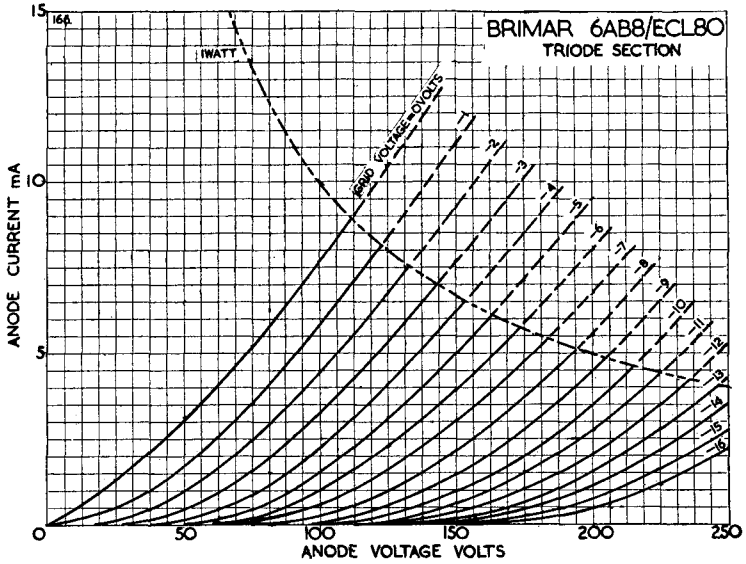
	Triode		*Pentode*
Anode Voltage ...	100	170	200 volts
Suppressor Voltage ...	0	0	0 volts
Screen Voltage ...	—	170	200 volts
Grid Voltage ...	—2.3	—6.7	—8.0 volts
Anode Current ...	4.0	15.0	17.5 mA
Screen Current ...	—	2.8	3.3 mA
Mutual Conductance ...	1.4	3.2	3.3 mA/V
Anode Impedance ...	12.5	150	150 kilohms
Amplification Factor ...	17.5	—	—
Inner Amplification Factor ...	—	14	14

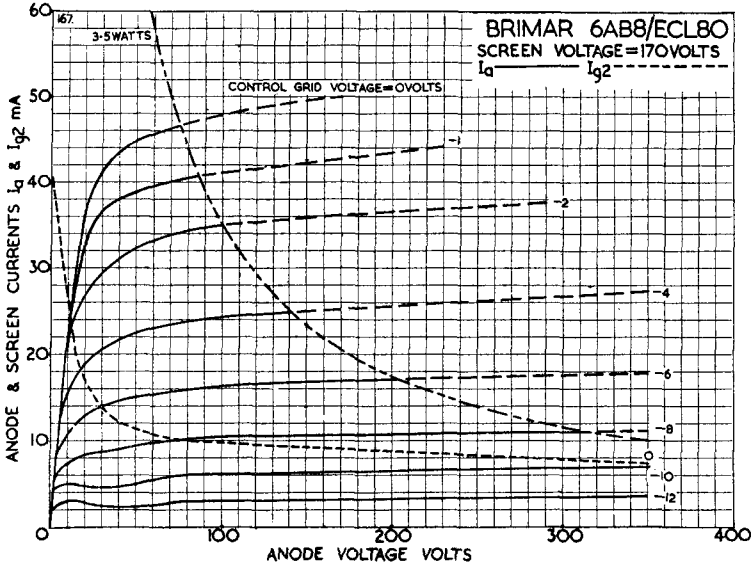
INTER-ELECTRODE CAPACITANCES*

Triode Grid to Pentode Anode ...	0.12 pF max.
Triode Anode to Pentode Anode ...	1.2 pF max.
Triode Grid to Pentode Grid 1 ...	0.2 pF max.
Triode Anode to Pentode Grid 1 ...	0.2 pF max.
Heater to Cathode ...	3.7 pF max.
Pentode Input ...	4.5 pF
Pentode Output ...	5.0 pF
Triode Grid to Cathode ...	2.0 pF
Triode Anode to Cathode ...	0.3 pF

	Triode	*Pentode*
Anode to Grid ...	0.9	0.2 pF max.
Grid No. 1 to Heater ...	0.05	0.25 pF

* *Measured without external shield.*


166.
BRIMAR 6AB8/ECL80
TRIODE SECTION
1WATT
GRID VOLTAGE=0VOLTS
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
-11
-12
-13
-14
-15
-16
ANODE CURRENT mA
0
5
10
15
50
100
150
200
250
ANODE VOLTAGE VOLTS


167.
3·5WATTS
BRIMAR 6AB8/ECL80
SCREEN VOLTAGE=170VOLTS
Ia
Ig2
CONTROL GRID VOLTAGE=0VOLTS
-1
-2
-4
-6
-8
0
-10
-12
ANODE & SCREEN CURRENTS Ia & Ig2 mA
0
10
20
30
40
50
60
100
200
300
400
ANODE VOLTAGE VOLTS