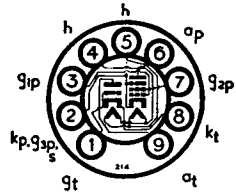


Current Equipment Types

TYPES ECL82/
PCL82



The BRIMAR ECL82 and PCL82 are noval triode-pentodes for use in frame time-base circuits and as sound amplifiers and output valves.

RATINGS

	ECL82	PCL82	volts		Heater Current		amps.	
			ECL82		PCL82		PCL82	
Heater Voltage	6.3	16.0			0.78	0.3		
			Triode	Pentode	Triode	Pentode	Triode	Pentode
Anode Voltage ($I_a = 0$)	550	900	550	900	volts max.	volts max.
Anode Voltage	300	600	250	600	volts max.	volts max.
Anode Peak Voltage, Positive †	600	2,500	600	2,500	volts max.	volts max.
Anode Peak Voltage, Negative	600	500	600	500	volts max.	volts max.
Anode Dissipation ($V_a < 250$ volts)	1	7	1	7	watts max.	watts max.
Anode Dissipation ($V_a > 250$ volts)	1	5	—	—	watts max.	watts max.
Screen Voltage ($I_{g_2} = 0$)	—	550	—	550	volts max.	volts max.
Screen Voltage	—	300	—	250	volts max.	volts max.
Screen Dissipation	—	1.8	—	1.8	watts max.	watts max.
Screen Dissipation (at full drive)	—	3.2	—	3.2	watts max.	watts max.
Cathode Current	15	50	15	50	mA max.	mA max.
Peak Cathode Current †*	250	—	250	—	mA max.	mA max.
Control Grid Resistance, Fixed Bias	1	1	1	1	MΩ max.	MΩ max.
Control Grid Resistance, Cathode Bias	3	2	3	2	MΩ max.	MΩ max.

† Maximum duration 4% of a cycle, with a maximum duration of 800 micro seconds.
* Under frame blocking oscillator conditions.

CHARACTERISTICS

ECL82 and PCL82

	ECL82		PCL82			ECL82		PCL82	
	Triode	Pentode	Triode	Pentode		Triode	Pentode	Triode	Pentode
Anode Voltage	100	170	volts	Screen Current	—	8	mA		
Screen Voltage	—	170	volts	Mutual Conductance	2.5	7.5	mA/V.		
Grid Voltage	0	-11.5	volts	Anode Impedance	27	16	kilohms.		
Anode Current	3.5	41	mA	Amplification Factor	70	10	($g_1 - g_2$)		

OPERATING CONDITIONS

Pentode section as an audio output stage

Anode and Screen Voltage	170	200	volts
Grid Voltage	-11.5	-16	volts
Anode Current	41	35	mA

Triode section as an A.F. amplifier

Anode Supply Voltage	170	200	volts
Anode Resistor	220	220	kilohms
Cathode Bias Resistor	2.7	2.2	kilohms
Optimum Load	4	5.6	kilohms
Power Output	3.3	3.5	watts
Distortion	10	10	per cent.
Maximum Output	25	26	V.r.m.s.
Gain	51	52	
Following Grid Resistor	700	700	kilohms

INTER-ELECTRODE CAPACITANCES

	ECL82		PCL82			ECL82		PCL82	
	ECL82	PCL82	ECL82	PCL82		ECL82	PCL82	ECL82	PCL82
Triode Input	2.7	2.7	pF	Pentode Anode to Pentode Grid	0.3	0.3	pF		
Triode Output	4	4	pF	Pentode Grid to Heater	0.3	0.3	pF		
Triode Anode to Triode Grid	4	4	pF	Triode Anode to Pentode Grid	0.02	0.02	pF		
Triode Grid to Heater	0.1	0.025	pF	Triode Grid to Pentode Anode	0.02	0.02	pF		
Pentode Input	9.3	9.0	pF	Triode Grid to Pentode Grid	0.025	0.025	pF		
Pentode Output	8	8	pF	Triode Anode to Pentode Anode	0.25	0.25	pF max.		

