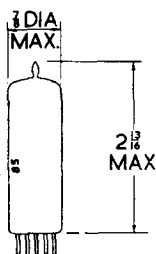
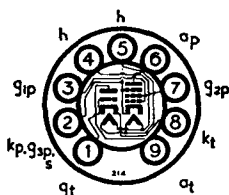


ECL82
PCL82



Current Equipment Types

TYPES ECL82/ PCL82



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

RATINGS

Heater Voltage	ECL82 6.3	PCL82 16.0	volts	Heater Current	ECL82 0.78	PCL82 0.3	amps.
Anode Voltage ($I_a = 0$)	...	...	550	900	550	900	volts max.
Anode Voltage	...	...	300	600	250	600	volts max.
Anode Peak Voltage, Positive †	...	...	600	2,500	600	2,500	volts max.
Anode Peak Voltage, Negative	...	...	600	500	600	500	volts max.
Anode Dissipation ($V_a < 250$ volts)	...	...	1	7	1	7	watts max.
Anode Dissipation ($V_a > 250$ volts)	...	...	1	5	—	—	watts max.
Screen Voltage ($I_{g2} = 0$)	...	...	—	550	—	550	volts max.
Screen Voltage	...	...	—	300	—	250	volts max.
Screen Dissipation	...	...	—	1.8	—	1.8	watts max.
Screen Dissipation (at full drive)	...	...	—	3.2	—	3.2	watts max.
Cathode Current	...	...	15	50	15	50	mA max.
Peak Cathode Current † *	...	...	250	—	250	—	mA max.
Control Grid Resistance, Fixed Bias	...	...	1	1	1	1	MΩ max.
Control Grid Resistance, Cathode Bias	...	...	3	2	3	2	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

	Triode	Pentode		Triode	Pentode	
Anode Voltage	100	170	volts	Screen Current	8	mA
Screen Voltage	—	170	volts	Mutual Conductance	2.5	mA/V.
Grid Voltage	0	—11.5	volts	Anode Impedance	27	kilohms.
Anode Current	3.5	41	mA	Amplification Factor	70	($\mu_1 - \mu_2$)

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	kilohms

INTER-ELECTRODE CAPACITANCES

	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.

