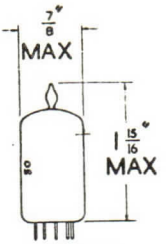
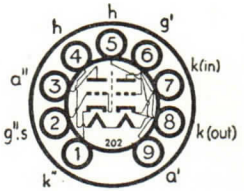
Current Equipment Type



B9A Base

TYPE **PCC84**
MINIATURE HIGH SLOPE DOUBLE TRIODE



The BRIMAR PCC84 consists of two separate high slope triode units designed for use in VHF cascode amplifiers. Normally, triode 1 is operated as a grounded cathode stage directly coupled to triode 2 which is connected as a grounded grid stage. This gives a low noise input amplifier for use in television receivers for Band III. The shield connected to the grid of triode 2 keeps coupling between the two units to a minimum.

Heater Current	0.3 amp.
Heater Voltage	7.0 volts

RATINGS

Anode Voltage ($I_a = 0$)	550 volts max.
Anode Voltage	180 volts max.
Anode Dissipation (either triode separately)	2.0 watts max.
Total Anode Dissipation (both triodes operating)	2.5 watts max.
Negative Grid Voltage	—50 volts max.
Grid Resistance Triode 1	500 k ohms max.
Grid Resistance Triode 2 (with autobias)†	20 k ohms max.
Grid Resistance Triode 2 (with fixed bias)	500 k ohms max.
Cathode Current (each triode)	18 mA max.
Heater-Cathode 1 potential	90 volts max.
Heater-Cathode 2 potential (heater positive)	90 volts max.
Heater-Cathode 2 potential (heater negative)*	250 volts max.
Resistor between Heater and Cathode	20 k ohms max.

** Maximum D.C. component 180 volts.*

† In direct coupled cascode circuits.

OPERATING CHARACTERISTICS

Anode Voltage	90 volts
Grid Voltage	—1.5 volts
Anode Current	12 mA
Mutual Conductance	6.0 mA/V
Amplification Factor	24
Anode Impedance	4,000 ohms
Input Impedance of Triode 1 at 200 Mc/s:	
Separate Cathodes	4,000 ohms
Strapped Cathodes	2,000 ohms

INTER-ELECTRODE CAPACITANCES *

$C_{a'-g'}$	1.1 pF	$C_{a''-k''}$	0.16 pF
$C_{in'}$	2.3 pF	$C_{k''-g''+h}$	4.9 pF
$C_{out'}$	0.5 pF	$C_{h-k''}$	2.8 pF
$C_{g'-h}$	0.25 pF max.	$C_{g'-a''}$	0.006 pF max.
$C_{a''-g''}$	2.3 pF	$C_{a'-a''}$	0.035 pF
$C_{a''-g''+h}$	2.5 pF	$C_{a'-k'+h+g''}$	1.2 pF

** Measured without external shield.*