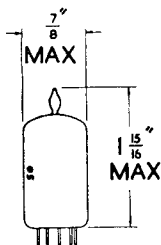
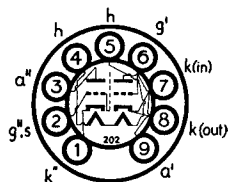


## Current Equipment Type



## TYPE ECC84 MINIATURE HIGH SLOPE DOUBLE TRIODE



The BRIMAR ECC84 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 Voltage	...	...	...	...	...	...	6.3 volts
Heater Current	...	...	...	...	...	...	0.335 amp.

### 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 other forms of bias)	...	...	...	...	...	...	100 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.

### 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	$C_{g''-a''}$	...	...	0.035 pF
$C_{a''-g''+h}$	...	...	2.5 pF	$C_{a''-k''+h+g''}$	...	...	1.2 pF

\* Measured without external shield.