RADIOTRON
1K4
PENTODE AMPLIFIER

Filament	Coated	
Voltage	2.0	d-c volts
Current	0.12	amp.
Maximum Overall Length		4-15/16"
Maximum Diameter		1-9/16"
Bulb		ST-12
Cap		Small Metal
Mounting Position		Any
Base		Small 4-Pin
Pin 1-Filament +		Pin 4-Filament -
Pin 2-Plate		Cap -Grid
Pin 3-Screen		

BOTTOM VIEW (4M)

Maximum Ratings, Interelectrode Capacitances, Typical Operating Conditions and Curves are the same as for type 1K5-G. Types 1K4 and 1K5-G are identical electrically.

RADIOTRON
1K5-G
PENTODE AMPLIFIER

Filament	Coated	
Voltage	2.0	d-c volts
Current	0.12	amp.
Direct Interelectrode Capacitances*:		
Pentode Connection:-		
Grid to Plate	0.010 max.	µµF.
Input	6.0	µµF.
Output	9.5	µµF.
Triode Connection#:-		
Grid to Plate	3.5	µµF.
Grid to Filament	2.5	µµF.
Plate to Filament	15.5	µµF.
Maximum Overall Length		4-29/32"
Maximum Diameter		1-9/16"
Bulb		ST-12
Cap		Skirted Miniature
Mounting Position		Any
Base		Small Shell Octal 7-Pin
Pin 1-No Connection		Pin 5-No Connection
Pin 2-Filament +		Pin 7-Filament -
Pin 3-Plate		Pin 8-No Connection
Pin 4-Screen		Cap -Grid

BOTTOM VIEW (G-5Y)

* With shield-can connected to negative filament terminal.
# Screen connected to plate.

1K5-G

RADIOTRON

1K5-G

PENTODE AMPLIFIER

(continued from preceding page)

AMPLIFIER - Class A_1 (Pentode Connection)

Plate Voltage				180 max.	volts
Screen Voltage				135 max.	volts
Screen Supply Voltage				180 max.	volts
Plate Dissipation				0.5 max.	watt
Screen Dissipation				0.13 max.	watt
Typical Operation:-					
Filament Voltage	2.0	2.0	2.0	2.0 d-c	volts
Plate Voltage	90	135	135	135	volts
Screen Voltage	67.5	30	45	67.5	volts
Grid Voltage‡	0	0	0	0	volts
Plate Current	2.48	0.65	1.25	2.5	mA.
Screen Current	0.95	0.23	0.48	0.93	mA.
Plate Resistance(approx.)	0.75	2.9	1.75	1.0	megohm
Transconductance	1020	620	820	1050	μmhos

AMPLIFIER - Class A_1 (Triode Connection).#

Plate Voltage				180 max.	volts
Plate & Screen Dissipation (total)				1.1 max.	watts
Typical Operation:-					
Filament Voltage	2.0	2.0	2.0	d-c	volts
Plate Voltage	90	135	180		volts
Grid Voltage‡	-3.0	-4.5	-6.0		volts
Plate Current	1.5	3.5	5.9		mA.
Plate Resistance	14,800	10,700	9,000		ohms
Transconductance	1,000	1,400	1,700		μmhos
Amplification Factor	14.8	15.0	15.3		
Load Resistance	30,000	15,000	10,000		ohms
Total Harmonic Distortion	5	5	5		%
Power Output	13	50	100	approx.	mW.

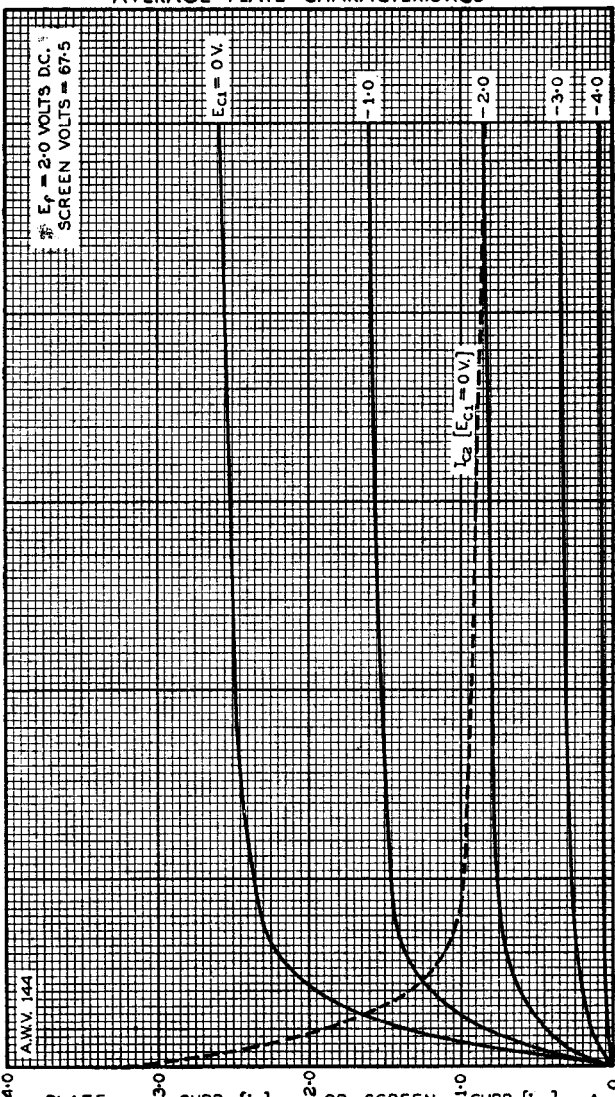
‡ Negative Filament Return. The grid circuit resistance should not exceed 3 megohms except under resistance coupled conditions.

Screen connected to plate.

RADIOTRON

1K5-G

AVERAGE PLATE CHARACTERISTICS



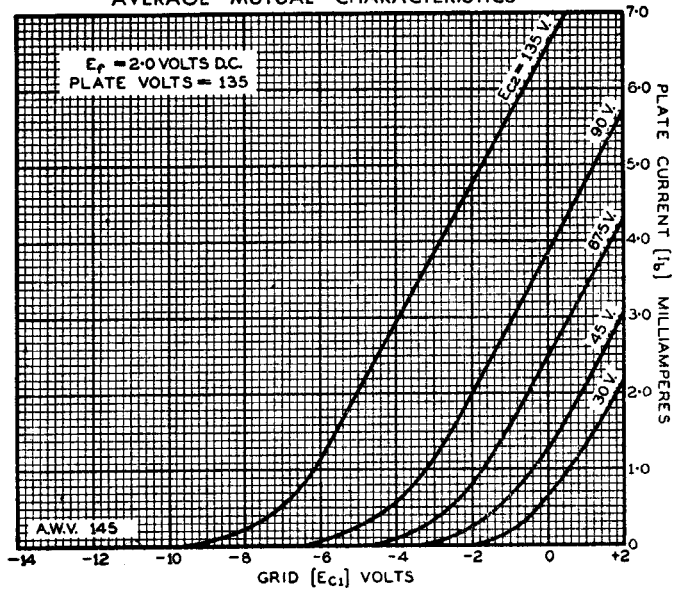
AMALGAMATED WIRELESS VALVE CO. PTY. LTD.
DECEMBER, 1940 SYDNEY, AUSTRALIA

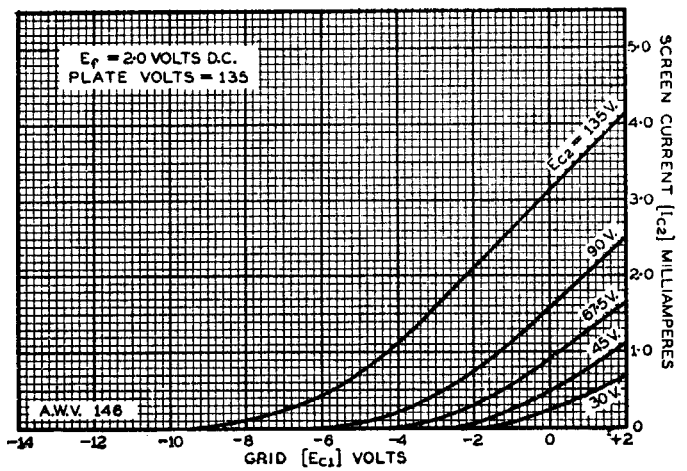
1K5-G

RADIOTRON

1K5-G

AVERAGE MUTUAL CHARACTERISTICS



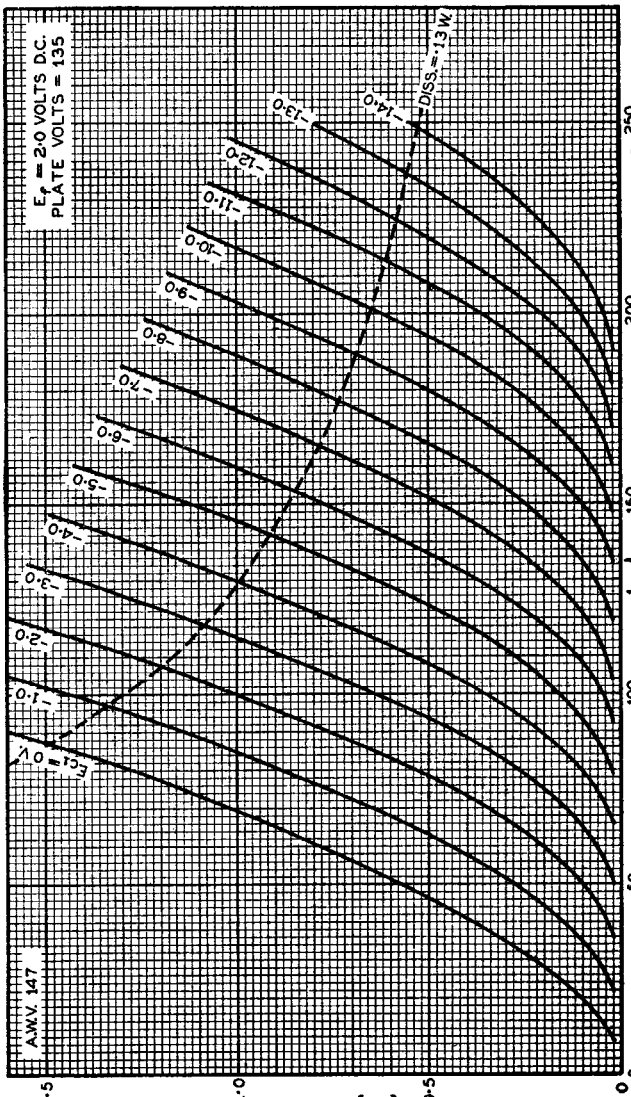


RADIOTRON

1K5-G

AVERAGE SCREEN CHARACTERISTICS

1K5-G SHEET 3



AMALGAMATED WIRELESS VALVE CO. PTY. LTD.

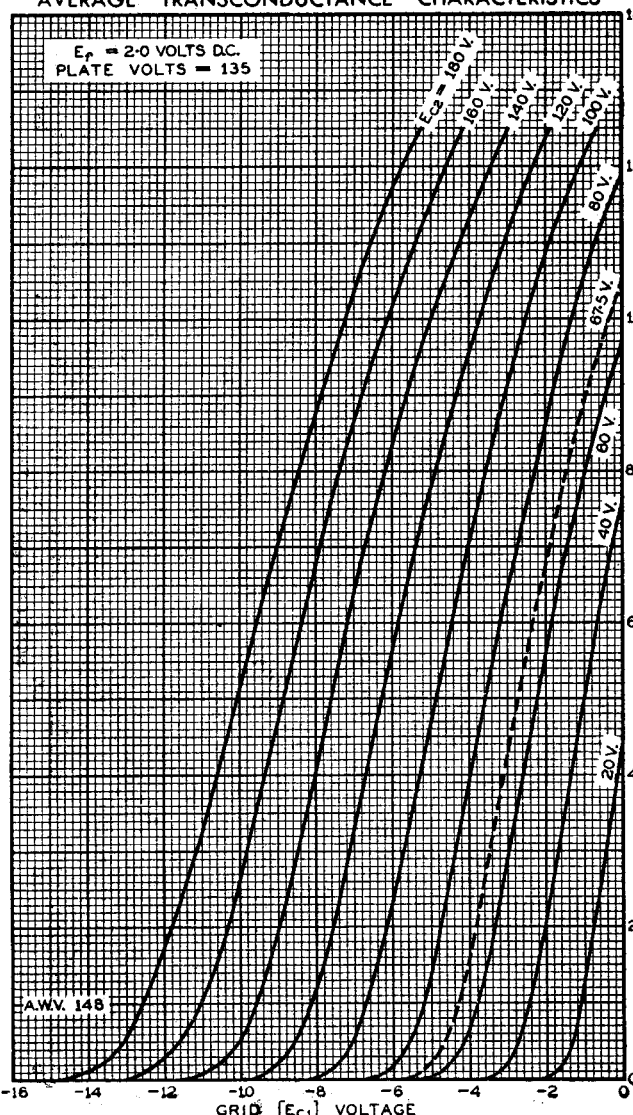
DECEMBER, 1940 SYDNEY, AUSTRALIA

1K5-G

RADIOTRON

1K5-G

AVERAGE TRANSCONDUCTANCE CHARACTERISTICS

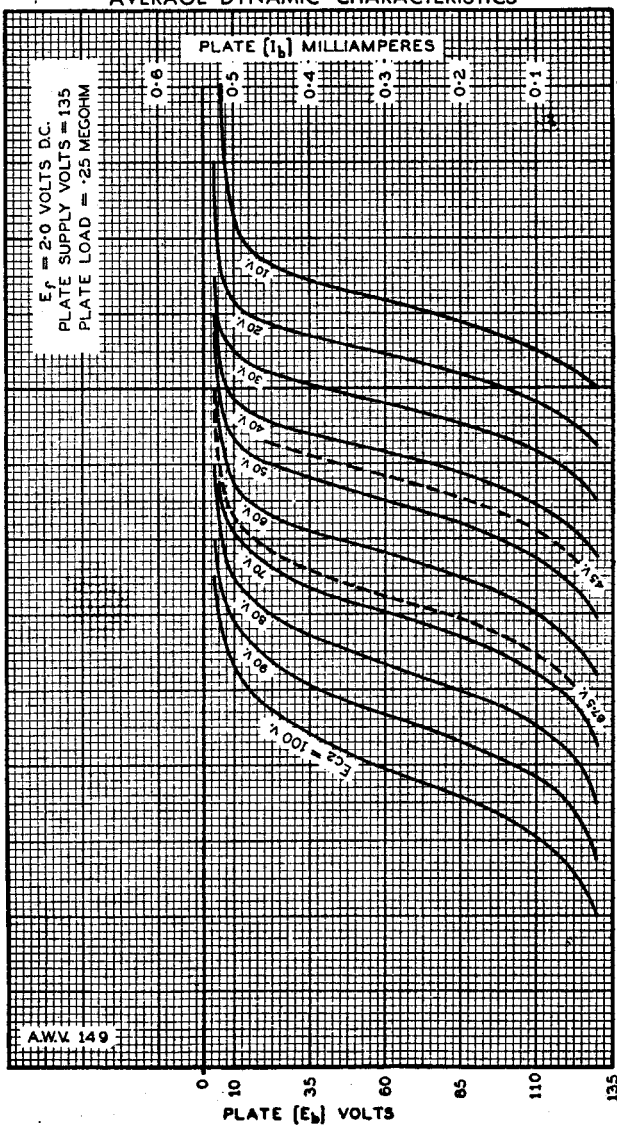


RADIOTRON

1K5-G

AVERAGE DYNAMIC CHARACTERISTICS

1K5-G SHEET 4



AMALGAMATED WIRELESS VALVE CO. PTY. LTD.

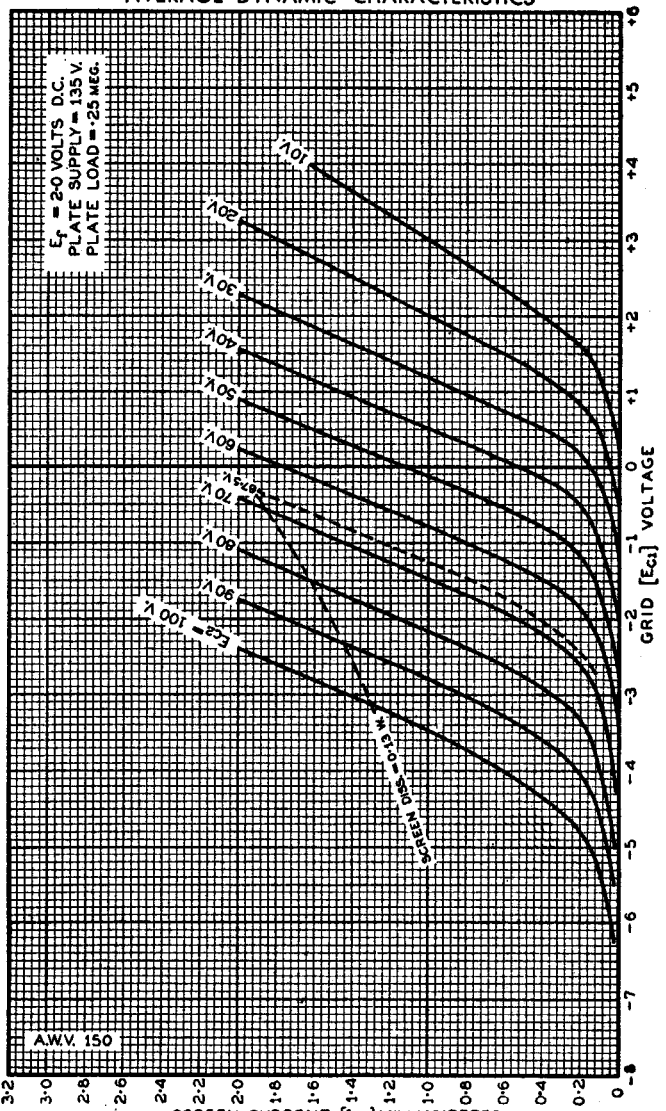
DECEMBER. 1940 SYDNEY. AUSTRALIA

1K5-G

RADIOTRON

1K5-G

AVERAGE DYNAMIC CHARACTERISTICS

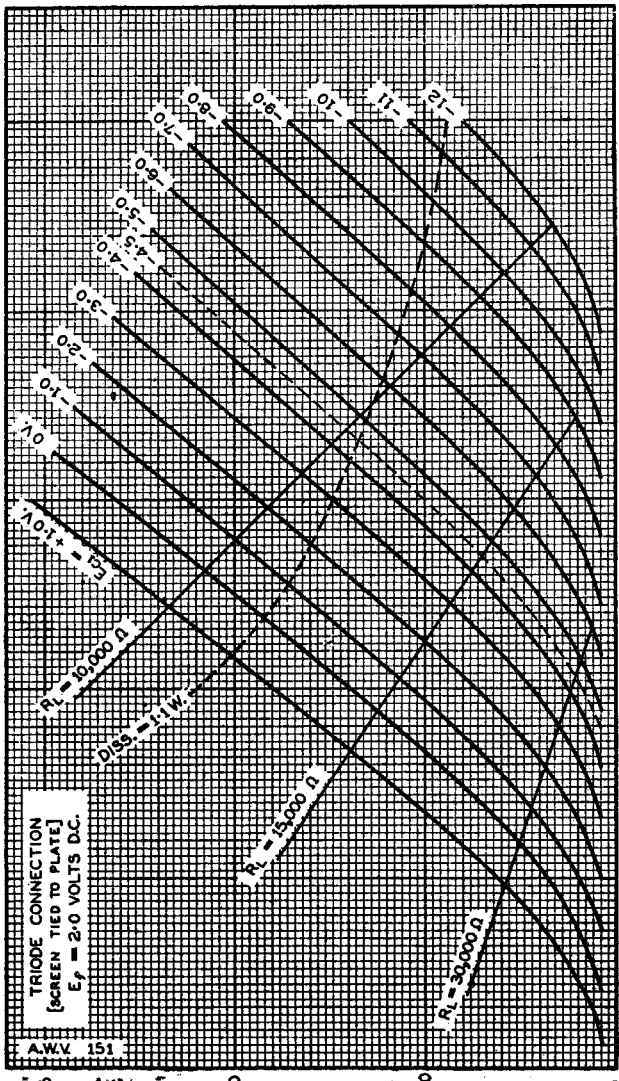


RADIOTRON

1K5-G

SHEET 3

AVERAGE TRIODE CHARACTERISTICS



AMALGAMATED WIRELESS VALVE CO. PTY. LTD.

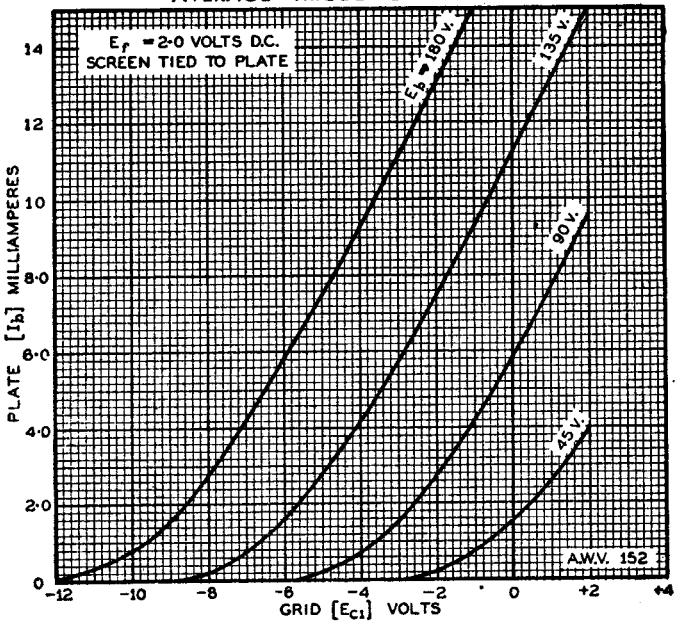
DECEMBER, 1940 SYDNEY, AUSTRALIA

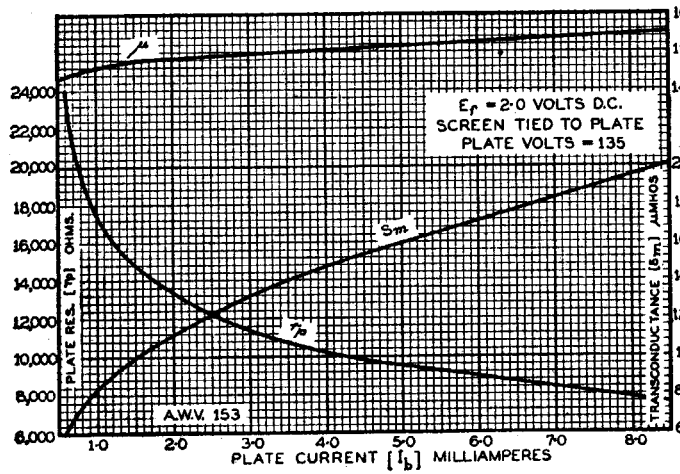
1K5-G

RADIOTRON

1K5-G

AVERAGE TRIODE CHARACTERISTICS





RESISTANCE COUPLED PENTODES

GROUP IV.

Type	Total Supply	Grid Bias Volts (Battery Types)	Screen Dropping Resistor (Megohms)	Cathode Bias Resistor Ohms (A.C. Types)	Plate Load Resistor (Megohms)	Following Grid Resistor (Megohms)	Ratio Output/Input Voltages at 400~ 0.25V. Input	Decibels Gain per Stage at 400~	Peak Voltage Output at 3% Distortion
1K4 } 1K5-G }	90	—1.5	0.75	—	0.25	1	59	35.4	25
						0.5	48	33.6	20
	135	—1.5	0.75	—	0.25	1	75	37.5	36
						0.5	62.5	35.9	30
	180	—1.5	1.0	—	0.25	1	88.5	39.0	48
						0.5	74	37.4	40
1K6 } 1K7-G }	90	—1.5	1.0	—	0.25	1	54	34.7	22
						0.5	45	33.1	18
	135	—1.5	1.0	—	0.25	1	76	37.6	34
						0.5	63	36.0	28
	180	—1.5	1.0	—	0.25	1	83	38.4	45
						0.5	69	36.8	38

GROUP V.

6C6 } 6J7-G } 57 } 1603 }	250	—	0.3	2,000	0.1	1.0	98	39.8	85
						0.5	82	38.3	78
						0.25	70	36.9	67
	400	—	0.3	2,000	0.1	1.0	105	41.4	135
						0.5	92	39.3	124
						0.25	80	38.1	106