Superseding Radiotron 6B6-G Data Sheet issued November, 1940.

RADIOTRON
6B6-G

DUPLEX-DIODE HIGH-MU TRIODE

Heater	Coated Unipotential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.3	amp.
Direct Interelectrode Capacitances:●		
Grid to Plate	1.3	µµF
Grid to Cathode	2.7	µµF
Plate to Cathode	4.5	µµF
Maximum Overall Length		4-15/32"
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 2-Heater
- Pin 3-Triode Plate
- Pin 4-Diode Plate #2
- Pin 5-Diode Plate #1
- Pin 7-Heater
- Pin 8-Cathode
- Cap -Grid

BOTTOM VIEW

DIODE UNITS - Two

For average diode characteristics see under 6B7, 6B7S.

Consideration of these units is given under type 85. The triode unit of type 6B6-G is not suitable for diode-biasing but must be used with cathode or grid-leak biasing as set out elsewhere on this data sheet. Alternatively the required bias voltage may be derived from a bias battery or other external source.

TRIODE UNIT - Class A Amplifier△

Operating Conditions and Characteristics:

Heater*	6.3	volts
Plate Voltage	250	volts
Grid Voltage	-2.0	volts
Amplification Factor	100	
Plate Resistance	91000	ohms
Transconductance	1100	umhos
Plate Current	0.9	mA.

TRIODE UNIT

(As Res.-Coupled Amplifier with Cathode Bias**)

Heater*	6.3	6.3	6.3	6.3	volts
Plate Supply	180	180	300	300	volts
Plate Load Res.	0.1	0.1	0.1	0.1	meg.
Grid Res. of Following Valve	.25	0.5	.25	0.5	meg.
Cath. Bias Res.	2900	3000	2200	2300	ohms
Peak Output▽	22	23	41	45	volts
Voltage Gain	36	37	39	42	times

● With a close-fitting shield connected to cathode.
* In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.
△ The triode unit of type 6B6-G, having a high plate-resistance is not suitable for use as a transformer-coupled amplifier.

For other footnotes see back of sheet.

AMALGAMATED WIRELESS VALVE CO. PTY. LTD.
JULY 1941 SYDNEY, AUSTRALIA

6B6-G

RADIOTRON

6B6-G

DUPLEX-DIODE HIGH-MU TRIODE

TRIODE UNIT

(As Res.-Coupled Amplifier with Cathode Bias**)

Heater	6.3	6.3	6.3	6.3	volts
Plate Supply	180	180	300	300	volts
Plate Load Res.	.25	.25	.25	.25	meg.
Grid Res. of Following Valve	0.5	1.0	0.5	1.0	meg.
Cath. Bias Res.	4800	5300	3900	4200	ohms
Peak Output°	28	33	51	60	volts
Voltage Gain	50	53	53	56	times

TRIODE UNIT

(As Res.-Coupled Amplifier with Grid-Leak Bias•)

Heater	6.3	6.3	volts
Plate Supply	250	250	volts
Plate Load Res.	.25	.25	meg.
Grid Resistor	5.0	10	meg.
Grid Resistor of Following Valve	1.0	1.0	meg.
Peak Output	41.5	43.8	volts
Distortion (max.output)	5.5	4.8	percent.
Voltage Gain	49	51.6	times

**The value specified for the cathode-bias resistor is the exact value but in most cases the nearest standard value may be used satisfactorily. The figures of gain are on the assumption that the bias resistor is adequately bypassed.

° At the grid current point.

• The grid resistor of stated value is returned directly to the cathode.

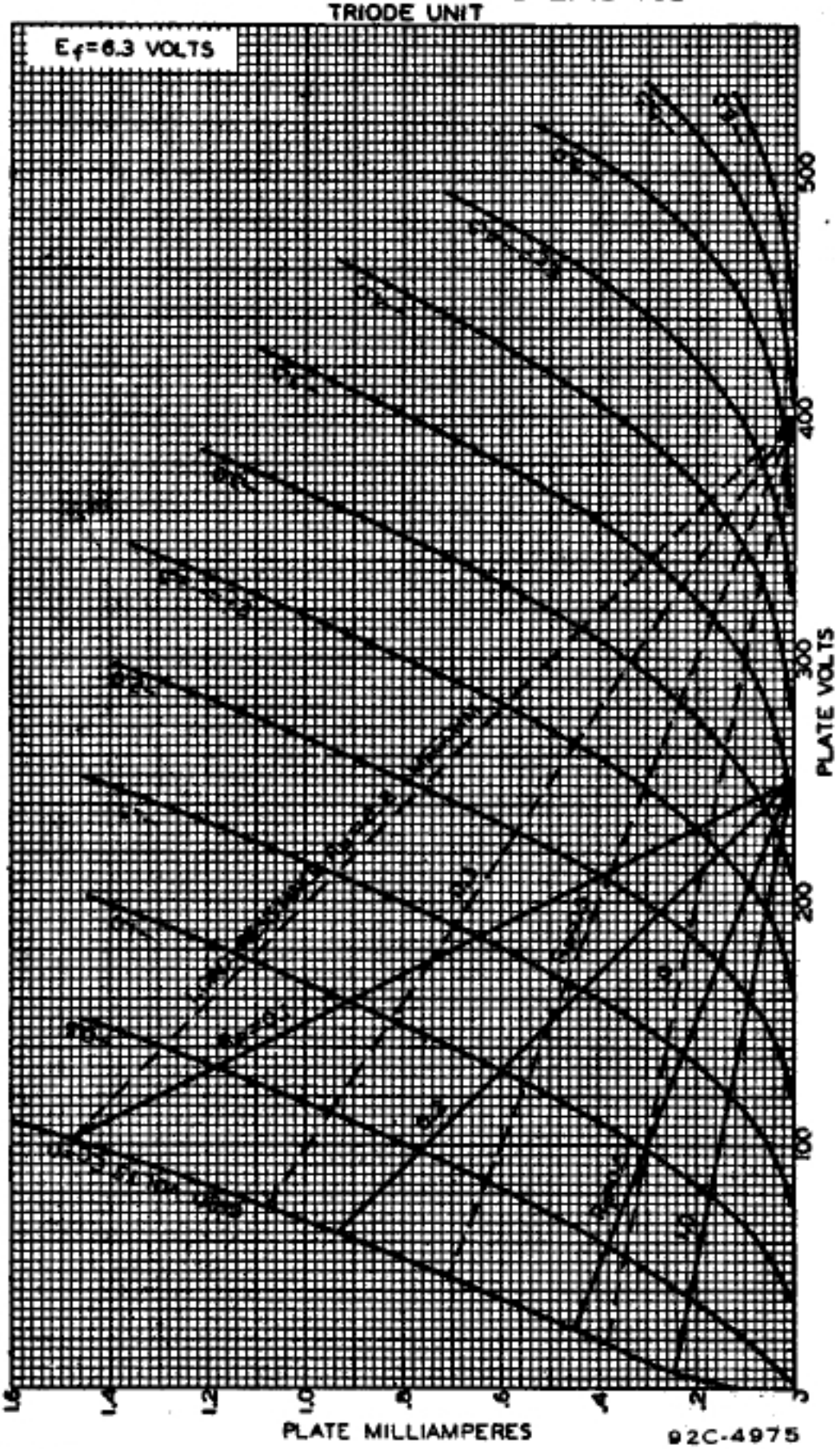
Note: The grid-circuit resistance for type 6B6-G may be as high as 10 megohms provided that the circuit constants are such that the plate current cannot exceed 1.0 mA.

RADIOTRON

6B6-G

AVERAGE PLATE CHARACTERISTICS

TRIODE UNIT



AMALGAMATED WIRELESS VALVE CO. PTY. LTD.
JULY, 1941
SYDNEY, AUSTRALIA

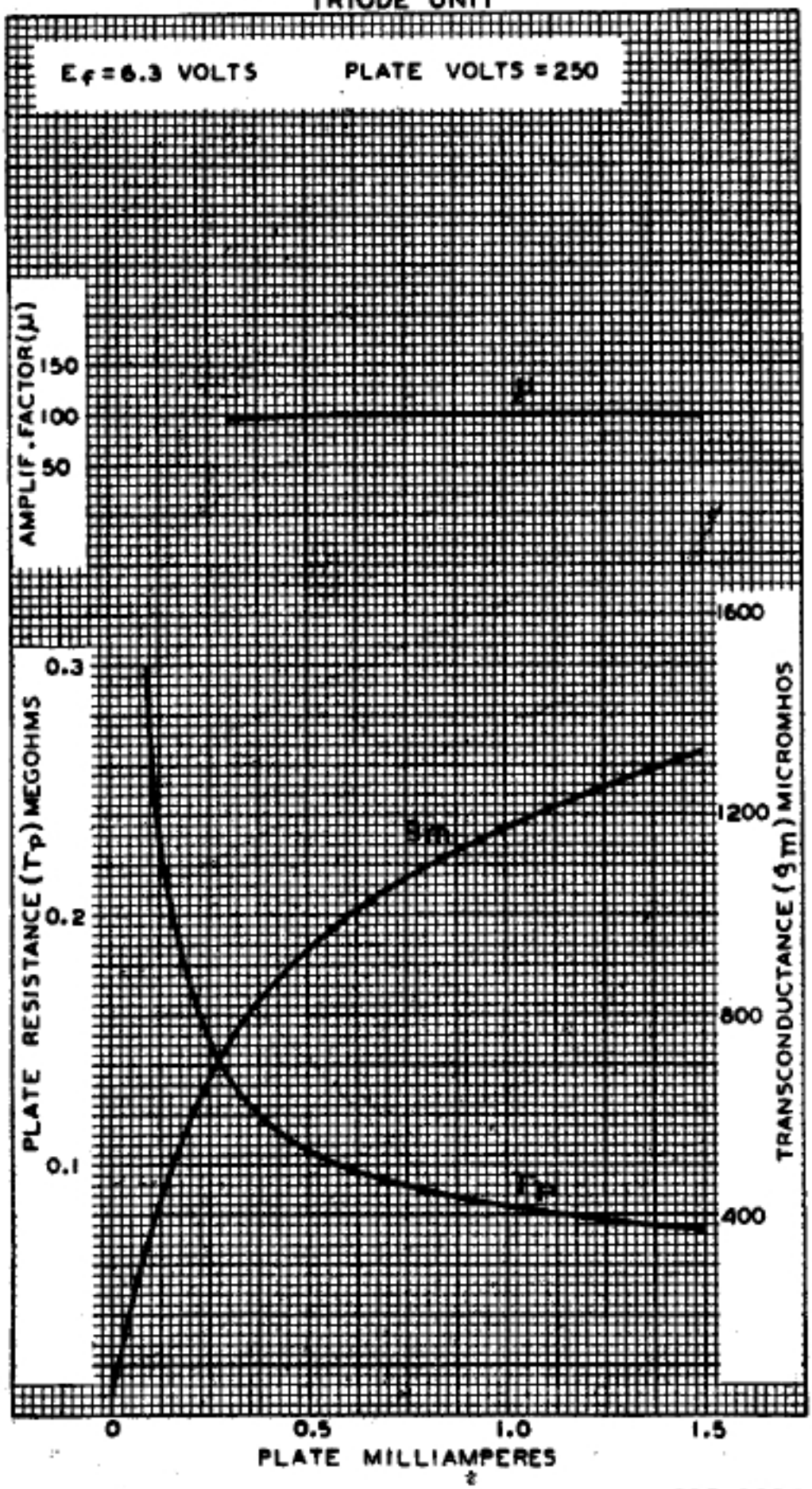
6B6-G

RADIOTRON

6B6-G

AVERAGE CHARACTERISTICS

TRIODE UNIT



92C-5284