RETMA Registration Data

TYPE 3Z4

POWER AMPLIFIER PENTODE

Mechanical Data

Cathode..... Coated Filament
Outline Drawing...5-2 Bulb.....T - 5 ½
Base ..... E7-1 Miniature Button 7 Pin
Maximum Diameter ..... 3/4"
Maximum Seated Height .....1 7/8"
Maximum Overall Length .....2 1/8"
Pin Connections .... Basing 7BA

Pin 1 ... Negative Filament (Parallel)	Pin 5 ... Filament Centre Tap & Grid No.3 (Parallel)
Pin 2 ... Plate	Pin 6 ... Plate
Pin 3 ... Grid No.1	Pin 7 ... Positive Filament
Pin 4 ... Grid No.2	

Mounting Position ..... Any

Electrical Data

Filament Characteristics	Parallel	Series
Filament Voltage (dc).....	1.4 V	2.8 V
Filament Current.....	50 mA	25 mA

Ratings (Design Centre Values)

Maximum Plate Voltage.....	90 V
Maximum Grid No.2 Voltage	67.5 V
Maximum Cathode Current	11 mA

Typical Operating Conditions and Characteristics

Plate Voltage	67.5 V
Grid No.2 Voltage	67.5 V
Grid No.1 Voltage	−7 V
Plate Resistance (approx.).....	0.1 megohm
Transconductance	1450 micro mhos
Peak a-f Signal Voltage	7 V
Zero Signal Plate Current	6.5 mA
Zero Signal Grid No.2 Current	1.3 mA
Load Resistance	8000 ohms
Total Harmonic Distortion	12 %
Power Output	0.21 W

10/31/56

THE FEDERATION OF JAPAN ELECTRIC
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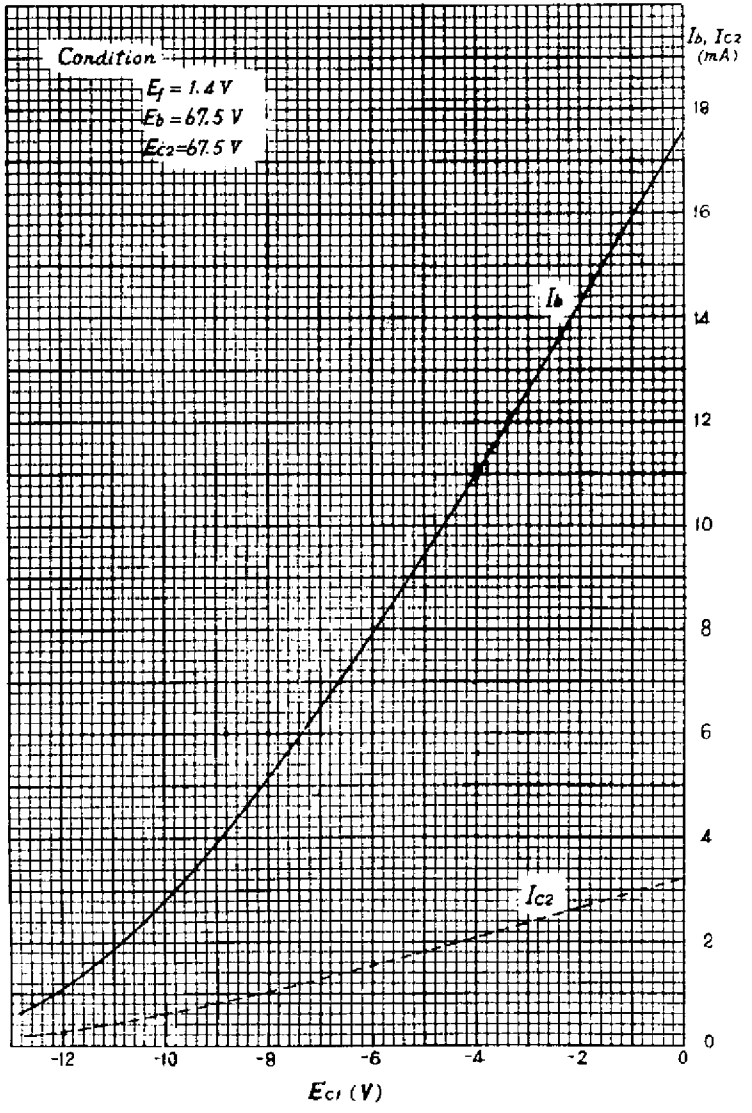
$E_{c1} - I_b, I_{c2}$



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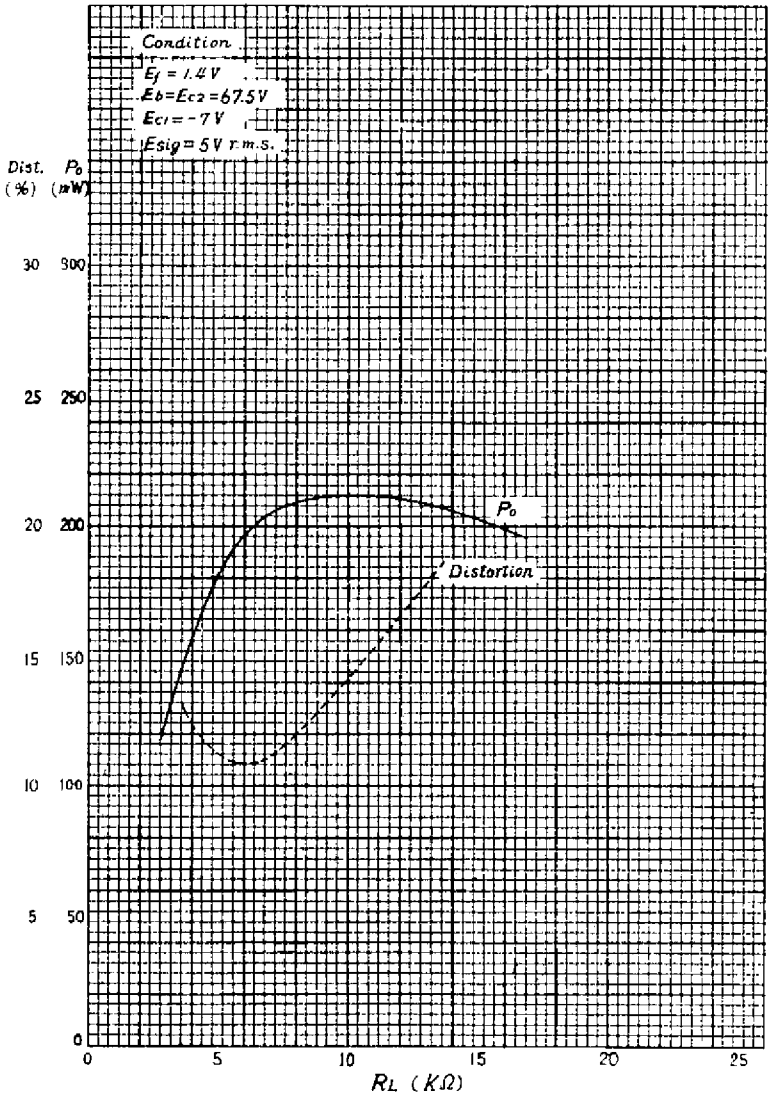
$R_L - P_o$, Distortion



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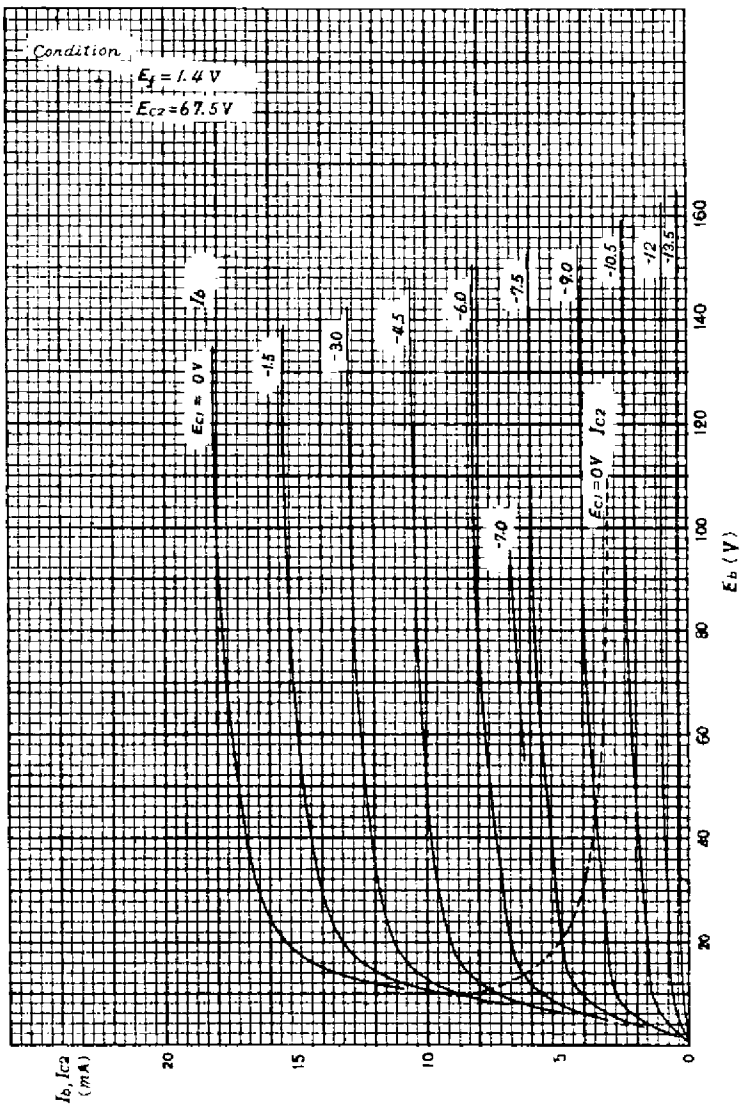
$E_b - I_b, I_{c2}$


Condition
E_f = 1.4 V
E_{c2} = 67.5 V
I_b
E_{c1} = 0 V
-1.5
-3.0
-4.5
-6.0
-7.5
-9.0
-10.5
-12
-13.5
I_{c2}
E_{c1} = 0 V
-7.0
I_b, I_{c2} (mA)
20
15
10
5
0
20
40
60
80
100
120
140
160
E_b (V)