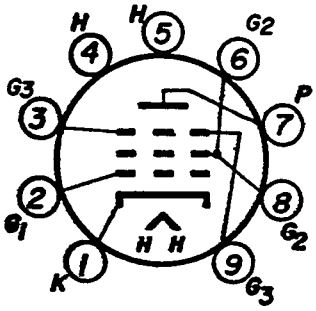
6LD6AMPE

AMPEREX TUBE TYPE 6LD6

TENTATIVE DATA

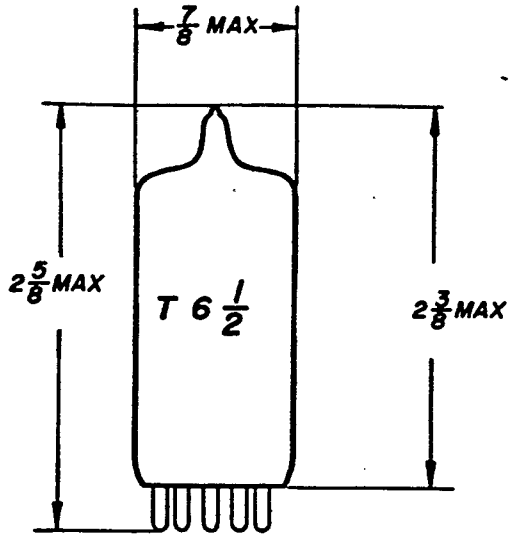
VIDEO OUTPUT PENTODE

Luminance output tube in color T. V. receivers.



PIN CONNECTION

1 – CATHODE
2 – GRID NO. 1
3 – GRID NO.3
4 – HEATER
5 – HEATER
6 – GRID NO.2
7 – PLATE
8 – GRID NO. 2
9 – GRID NO. 3



General Characteristics

MECHANICAL

Dimensions	see outline drawing
Base	Noval
Bulb	T 6-1/2

ELECTRICAL

Heater	indirect AC or DC series supply
Heater Current	800 mA
Heater Voltage	6.3 volts

Direct Interelectrode Capacitances

Plate to all except Grid No. 1	4 pf
Grid No. 1 to all except Plate	20 pf
Plate to Grid No. 1	0.075 pf

6LD6

TYPICAL CHARACTERISTICS

Plate Voltage	170 volts
Grid No. 2 Voltage	170 volts
Grid No. 3 Voltage	0 volts
Grid No. 1 Supply Voltage	0 volts
Cathode Resistor (decoupled)	25 ohms
Plate Current	30 mA
Grid No. 2 Current	6.5 mA
Transconductance	40,000 μmhos
Amplification Factor (Grid 1 to Grid 2)	70 --

LIMITING VALUES (design center rating system unless otherwise stated)

Plate Voltage	550 volts max.
	300 volts max.
Grid No. 2 Voltage	550 volts max.
	300 volts max.
Plate Dissipation	6 watts max.
Grid No. 2 Dissipation	2.5 watts max.
	3.0 watts max.[1]
Cathode Current	100 mA max.
Grid No. 1 Resistor	
at $R_k \geq 39\ \Omega$	0.1 m ohms max.
	0.5 m ohms max.
Cathode to Heater Voltage	200 volts max.

OPERATING CONDITIONS (Negative Modulation)

E_b	= 250 V
R_b	= 330 ohms
R_{av}	= 560 ohms
R_p	= 2.7 k ohms
R_{g2}	= 5.6 k ohms
R_k 2)	= 39 ohms
$+E_{bg1}$	= 4.5 V

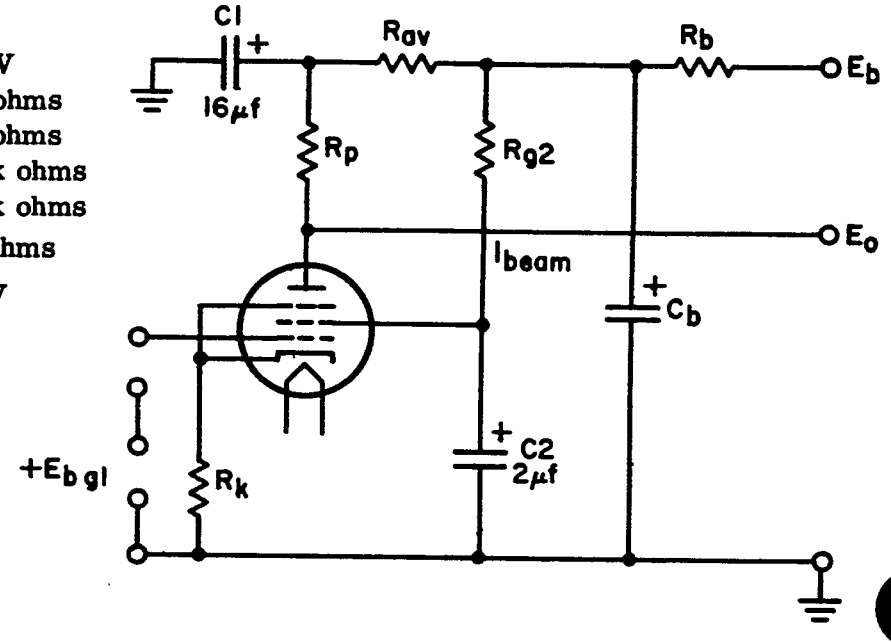


Figure 1

1 Design maximum rating system including no signal conditions.
2 Without by-pass capacitor.

E_{o_1}	=	100 V
E_{opp}	≥	140 V
Video-linearity	≥	0.8
E_{ipp}	ca.	5 V
I_{beam}	max.	7 mA

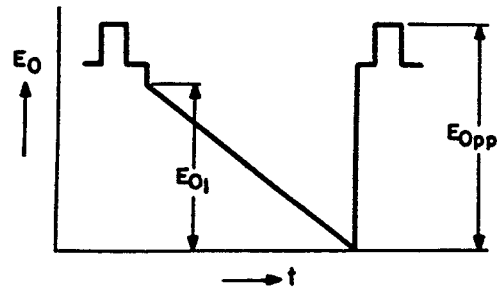


Figure 2

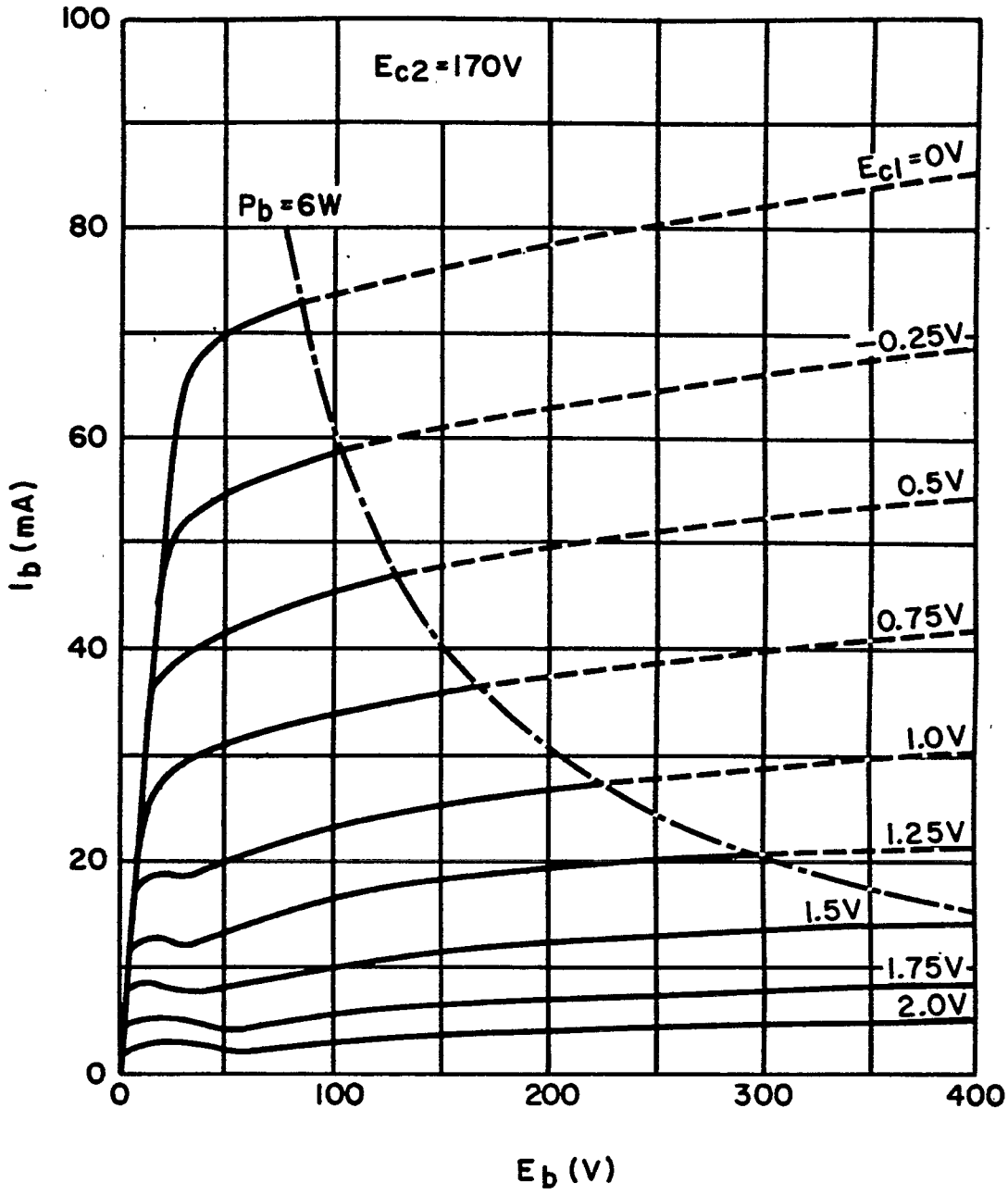
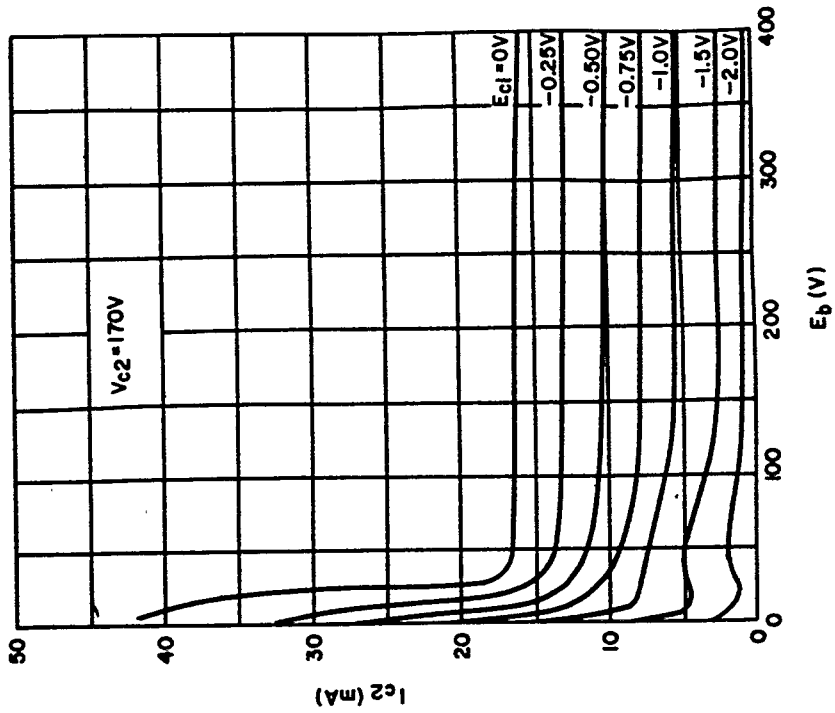
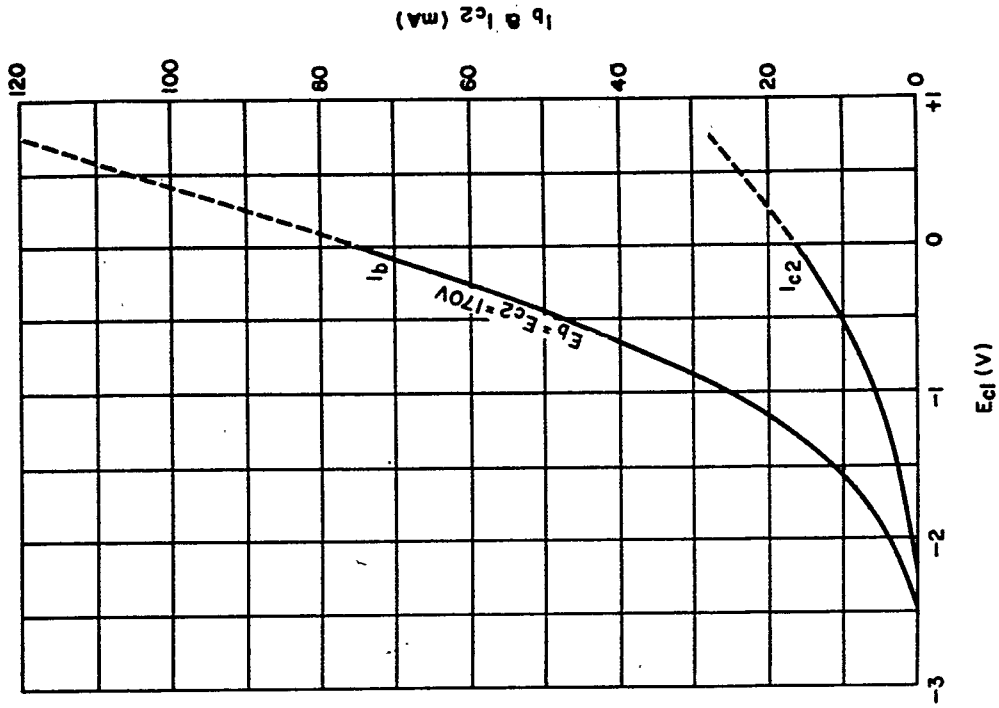


Plate Characteristics



Transfer Characteristics



Input Characteristics