Semiremote-Cutoff Pentode

9-PIN MINIATURE TYPE

FRAME-GRID CONSTRUCTION — DARK HEATER

For High-Gain IF-Amplifier Applications in TV Receivers

ELECTRICAL CHARACTERISTICS

Bogey Values[a]

Heater Voltage (AC or DC)	E_h	6.3	V
Heater Current	I_h	300	mA
Heater Warm-up Time	-	11	s
Direct Interelectrode Capacitances			
Without external shield			
Grid No.1 to plate	c_{g1-p}	0.019 max	pF
Input: G1 to (K, G3 + IS, G2, H)	c_i	9.5	pF
Output: P to (K, G3 + IS, G2, H)	c_o	3	pF

For the following characteristics, see Conditions

Plate Resistance (Approx.)	r_p	160	-	Ω
Transconductance	g_m	18000	-	μmho
DC Plate Current	I_b	17	-	mA
DC Grid-No.2 Current	I_{c2}	4.2	-	mA
Cutoff DC Grid-No.1 Voltage, For g_m = 10 μmho	$E_{c1(co)}$	-	-22	V

Conditions

Heater Voltage	E_h	Bogey Value		V
DC Plate Supply Voltage	E_{bb}	125	170	V
DC Grid-No.3 Voltage	E_{c3}	0	0	V
DC Grid-No.2 Supply Voltage	E_{cc2}	125	170	V
Grid No.1	-	Connected to negative end of R_k		
Cathode Resistor	R_k	56	56	Ω

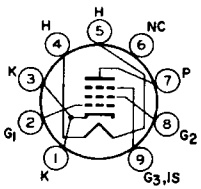
MECHANICAL CHARACTERISTICS

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2.187 in
Maximum Seated Length	1.937 in
Maximum Diameter	0.875 in
Length, Base Seat to Bulb Top, Excluding tip	1.469 to 1.656 in
Dimensional Outline (JEDEC 6-2)	See *General Section*
Envelope	JEDEC T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC E9-1)

6KT6

TERMINAL DIAGRAM (Bottom View)

Pin 1 – Cathode
Pin 2 – Grid No.1
Pin 3 – Cathode
Pin 4 – Heater
Pin 5 – Heater
Pin 6 – No Internal Connection
Pin 7 – Plate
Pin 8 – Grid No.2
Pin 9 – Grid No.3, Internal Shield



9PM

DESIGN-MAXIMUM RATINGS

For operation as a Class A_1 Amplifier Tube in TV Receivers

DC Plate Voltage	E_b	330	V
DC Grid-No.3 (Suppressor-Grid) Voltage	E_{c3}	+0	V
DC Grid-No.2 (Screen-Grid) Supply Voltage	E_{cc2}	330	V
DC Grid-No.2 Voltage	E_{c2}	See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section	
DC Grid-No.1 (Control-Grid) Voltage	E_{c1}	+0	V
Heater-Cathode Voltage			
Peak	e_{hkm}	±200	V
Average	$E_{hk(av)}$	100 -	V
Heater Voltage (AC or DC)	E_h	5.7 to 6.9	V
Grid-No.2 Input	P_{g2}		
For $E_{c2} \leq 165$ V	-	0.6	W
For $E_{c2} > 165$ V and < 330 V	-	See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section	
Plate Dissipation	P_b	3.1	W

MAXIMUM CIRCUIT VALUES

Grid-No.1 Circuit Resistance	$R_{g1(ckt)}$		
For fixed-bias operation	-	250	kΩ
For cathode-bias operation	-	1	MΩ

[a] Unless otherwise specified.

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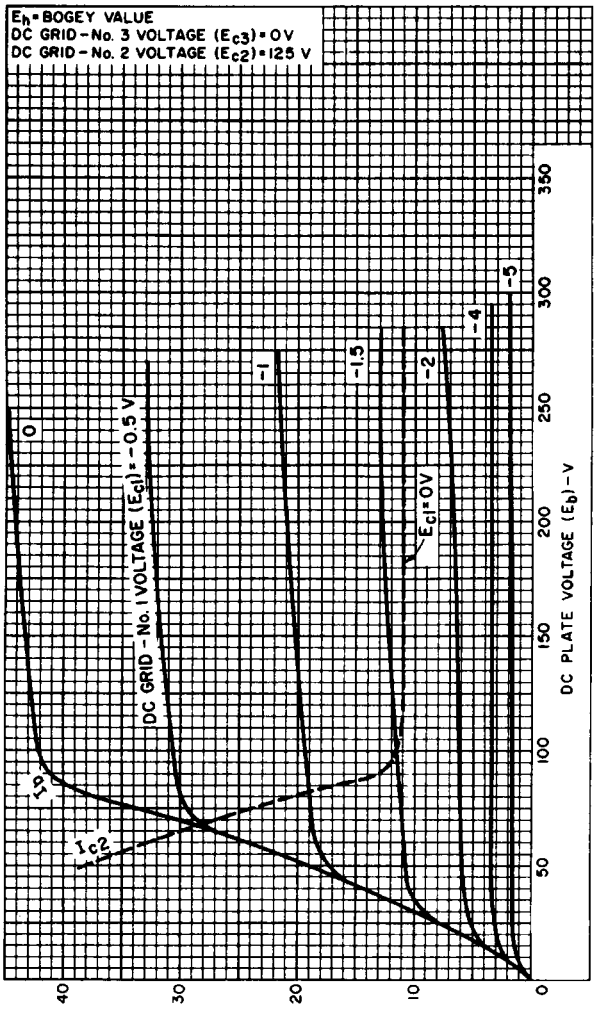
Typical Characteristics



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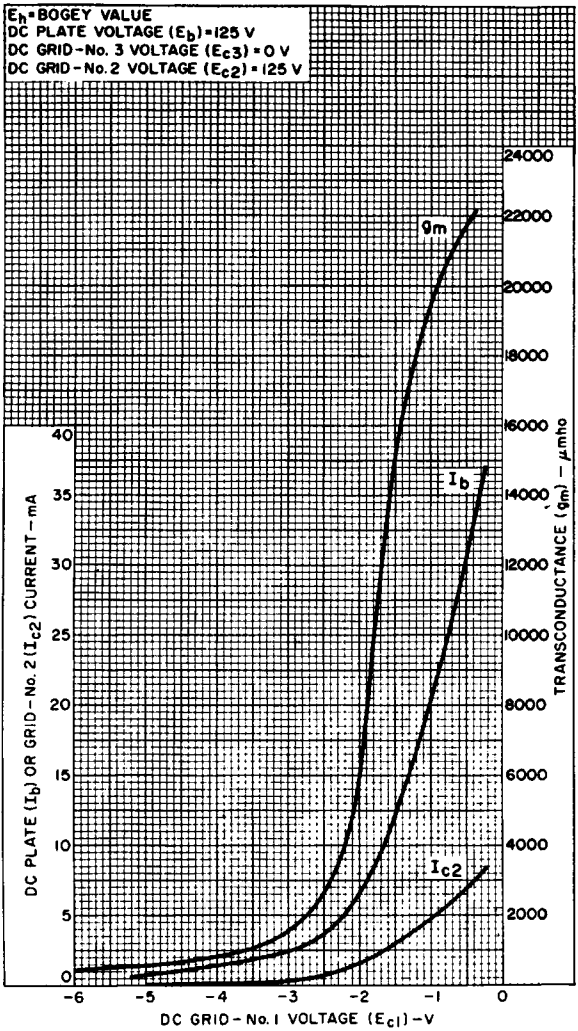
Typical Characteristics



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