Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

FRAME-GRID CONSTRUCTION

g_m = 30000 μmho

For Video-Output Amplifier Service in Color-TV Receivers

ELECTRICAL CHARACTERISTICS

		Bogey Values[a] Series	Parallel	
Heater Voltage (AC or DC)	E_h	11.0	5.50	V
Heater Current	I_h	300	600	mA
Direct Interelectrode Capacitances				
Without external shield				
Grid No.1 to plate	c_{g1-p}		0.15 max	pF
Input: G1 to (K, G3 + IS, G2, H)	c_i		14	pF
Output: P to (K, G3 + IS, G2, H)	c_o		5.0	pF

For the following characteristics, see Conditions

Plate Resistance (Approx.)	r_p	40	kΩ
Transconductance	g_m	30000	μmho
DC Plate Current	I_b	30	mA
DC Grid-No.2 Current	I_{c2}	5.2	mA
Cutoff DC Grid-No.1 Voltage. Plate μA = 100	$E_{c1(co)}$	-4.5	V

Conditions

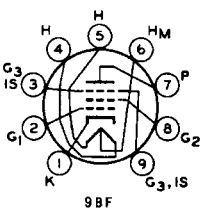
		Bogey Value	
Heater Voltage	E_h		V
DC Plate Supply Voltage	E_{bb}	200	V
DC Grid-No.3 Voltage	E_{c3}	0	V
DC Grid-No.2 Supply Voltage	E_{cc2}	135	V
DC Grid-No.1 Supply Voltage	E_{cc1}	0	V
Cathode Resistor	R_k	47	Ω

MECHANICAL CHARACTERISTICS

Operating Position . . . . . Any
Type of Cathode . . . . . Coated Unipotential
Maximum Overall Length . . . . . 2.625 in
Maximum Seated Length . . . . . 2.375 in
Maximum Diameter . . . . . 0.875 in
Dimensional Outline (JEDEC 6-3) . . . . . See *General Section*
Envelope . . . . . JEDEC T6-1/2
Base . . . . . Small-Button Noval 9-Pin (JEDEC E9-1)

TERMINAL DIAGRAM (Bottom View)

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



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DESIGN-MAXIMUM RATINGS

For operation as a Class A_1 Amplifier Tube

DC Plate Voltage	E_b		330	V
DC Grid-No.2 (Screen-Grid) Supply Voltage	E_{cc2}	See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section		
DC Grid-No.1 (Control-Grid) Voltage				
Positive-bias value	E_{c1}		0	V
Heater-Cathode Voltage				
Peak	e_{hkm}		±200	V
Average[b]	$E_{hk(av)}$		100	V
Heater Voltage (AC or DC)	E_f			
Series	-	9.9 min	12.1 max	V
Parallel	-	4.95 min	6.05 max	V
Grid-No.2 Input	P_{g2}			
For $E_{c2} \leq 165$ V	-		1	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		7	W

MAXIMUM CIRCUIT VALUES

Grid-No.1 Circuit Resistance	$R_{g1(ckt)}$		
For fixed-bias operation	-	0.1	MΩ
For cathode-bias operation	-	0.25	MΩ

[a] Unless otherwise specified.
[b] Measured with a dc meter.

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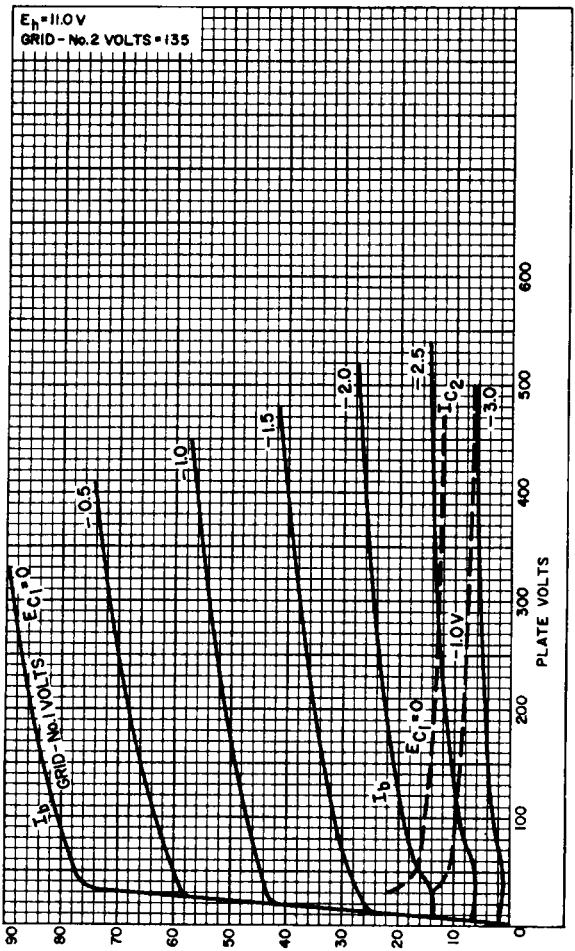
Electronic Components and Devices Harrison, N. J.

Typical Characteristics



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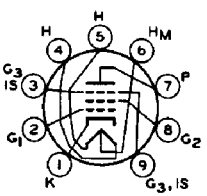

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