

Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

FRAME-GRID CONSTRUCTION

DARK HEATER

For Video-Output-Amplifier Service in Color-TV Receivers

ELECTRICAL CHARACTERISTICS

Bogey Values^a

Heater Voltage (AC or DC)	E_h	6.3	V
Heater Current	I_h	0.520	A
Direct Interelectrode Capacitances			
Without external shield			
Grid No.1 to plate	C_{g1-p}	0.16 max	pF
Input: G1 to (K, G3 + IS, G2, H)	C_{ci}	14	pF
Output: P to (K, G3 + IS, G2, H).	C_o	6.0	pF

For the following characteristics, see Conditions

Plate Resistance (Approx.)	r_p	40	k Ω
Transconductance	g_m	30000	μ mho
DC Plate Current	I_b	30	mA
DC Grid-No.2 Current	I_{c2}	5.2	mA
Cutoff DC Grid-No.1 Voltage	$E_{cl}(co)$	-4.5	V

Plate $\mu A = 100$

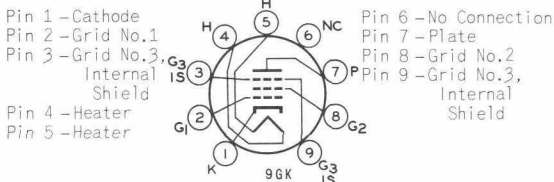
Conditions

Heater Voltage	E_h	Bogey Value	V
Plate Supply Voltage	E_{bb}	200	V
Grid-No.3		connected to	
		cathode at socket	
Grid-No.2 Supply Voltage	E_{cc2}	135	V
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
Length, Base Seat to Bulb Top	
Excluding tip	1.906 to 2.094 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)



DESIGN-MAXIMUM RATINGS

For operation as a Class A₁ Amplifier

Plate Voltage.	E_b	330	V
Grid-No.2 (Screen-Grid)			
Supply Voltage.	E_{cc2}	330	V
Grid-No.2 Voltage. . . .	E_{c2}	See Grid-No.2 Input Rating Chart at front of Receiving Tube Section	
Grid-No.1 (Control-Grid)			
Voltage			
Positive-bias value. .	E_{c1}	0	V
Heater-Cathode Voltage			
Peak	e_{hkm}	±200	V
DC	E_{hk}	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. . . .		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	9	W

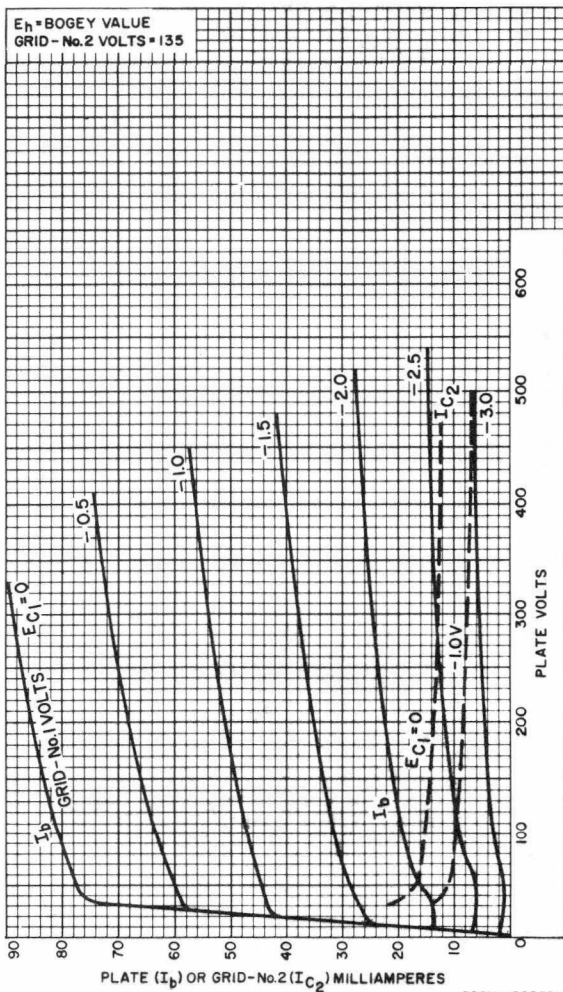
MAXIMUM CIRCUIT VALUES

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

^a Unless otherwise specified.



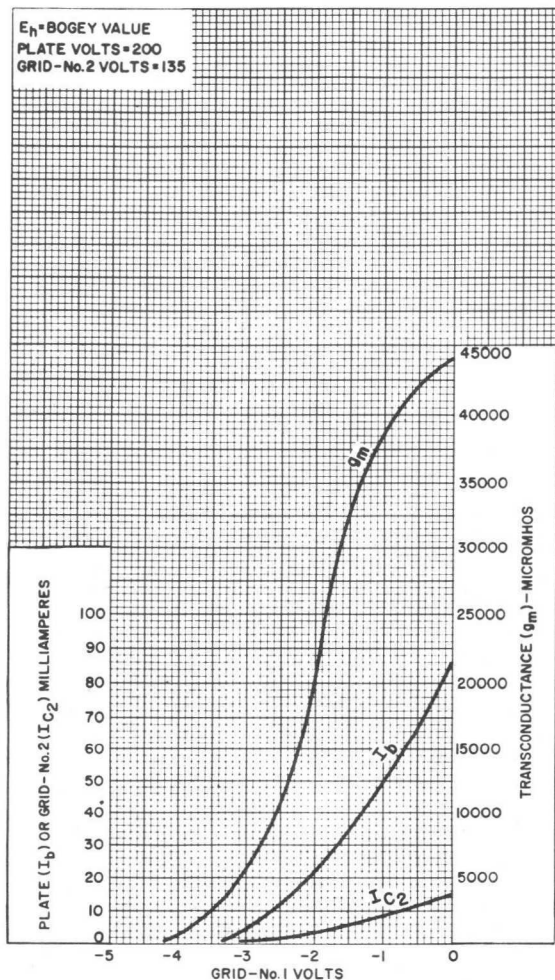
Typical Characteristics



92CM-13833RI



Typical Characteristics



92CM-13832R1

