

Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

FRAME-GRID CONSTRUCTION

DARK HEATER

For Video-Output Service in Color-TV Receivers

ELECTRICAL CHARACTERISTICS

Bogey Values^a

Heater Voltage (AC or DC)	E_h	7.3	V
Heater Current	I_h	0.450	A
Heater Warm-up Time.		11	s
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_i	13.0	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	45	k Ω
Transconductance	g_m	24000	μ mho
DC Plate Current	I_b	25	mA
DC Grid-No.2 Current	I_{c2}	3.6	mA
Cutoff DC Grid-No.1 Voltage.	$E_{c1}(co)$	-5.2	V

Conditions

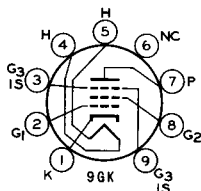
Heater Voltage	E_h	7.3	V
DC Plate Supply Voltage.	E_{bb}	250	V
Grid No.3.	-	Connected to cathode at socket	
DC Grid-No.2 Supply Voltage.	E_{cc2}	115	V
DC Grid-No.1 Supply Voltage.	E_{cc1}	0	V
Cathode Resistor	R_k	75	Ω

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.	1.906 to 2.094 in
Excluding tip	
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 - No Internal Connection
- Pin 7 - Plate
- Pin 8 - Grid No.2
- Pin 9 - Same as Pin 3



DESIGN-MAXIMUM RATINGS

For operation as a Class A₁ Amplifier Tube

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 Current	I _h	0.420 to 0.480	A
Grid-No.2 Input			
For E _{c2} ≤ 165 V.	-	1	W
For E _{c2} ≥ 165 and ≤ 330 V.	-	See Grid-No.2 Input Rating Chart	
at front of Receiving Tube Section			
Plate Dissipation.	P _b	9	W

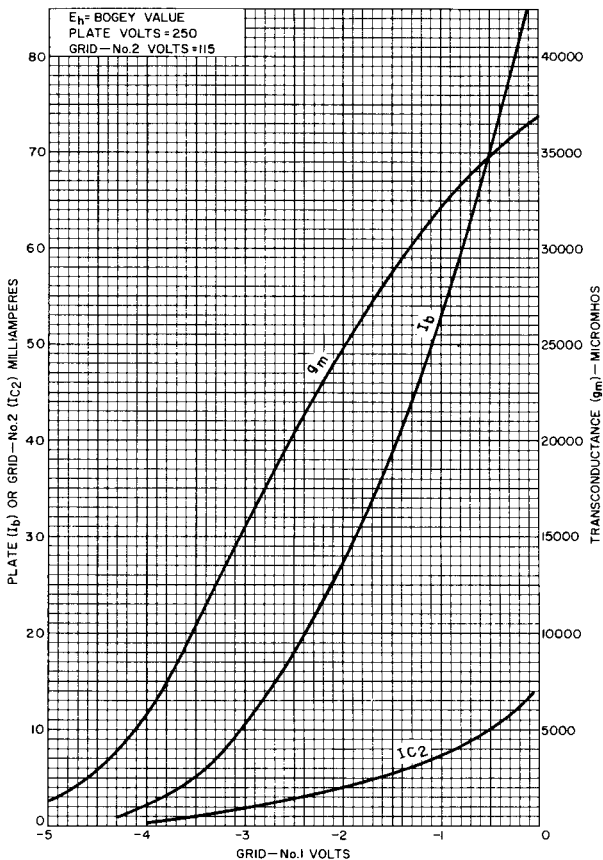
MAXIMUM CIRCUIT VALUES

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

^a Unless otherwise specified.



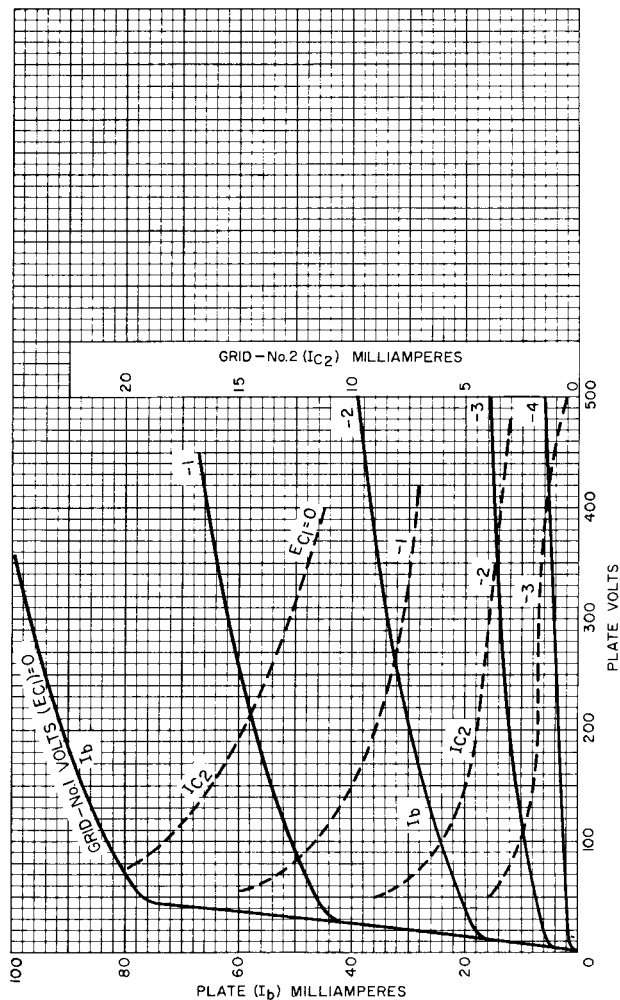
Typical Characteristics



92CM-14533



Typical Characteristics



92CM-14532

