

Beam Power Tube

NOVAR TYPE

SPECIAL MULTIPLE-FIN PLATE STRUCTURE^aSPECIALLY FORMULATED ENVELOPE GLASS^b

For Color-TV Horizontal-Deflection-Amplifier Applications

ELECTRICAL

Heater Characteristics and Ratings

Voltage (AC or DC)	6.3 ± 0.6	V
Current at 6.3 V.	1.600	A
Maximum heater-cathode voltage:		
Heater negative with respect to cathode:		
Peak.	200	V
Heater positive with respect to cathode:		
Peak.	200	V
DC component.	100	V

Direct Interelectrode Capacitances (Approx.)

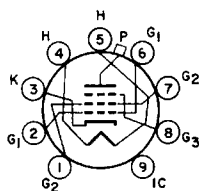
Without external shield

Grid No.1 to plate.	1.2	pF
Input: G1 to (K, G3, G2, H).	22	pF
Output: P to (K, G3, G2, H).	9.0	pF

MECHANICAL

Operating Position.	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length.	3.550 in
Seated Length	2.910 to 3.170 in
Diameter.	1.438 to 1.562 in
Dimensional Outline	See General Section
Bulb.	T12
Cap.	Skirted Miniature (JEDEC No. C1-2 or C1-3)
Base.	Large-Button Novar 9-Pin with Exhaust Tip (JEDEC E9-88)
Basing Designation for BOTTOM VIEW.	9QL

- Pin 1—Grid No.2
- Pin 2—Grid No.1
- Pin 3—Cathode
- Pin 4—Heater
- Pin 5—Heater
- Pin 6—Grid No.1
- Pin 7—Grid No.2
- Pin 8—Grid No.3
- Pin 9—Do Not Use
- Cap—Plate



CHARACTERISTICS

For the following characteristics, see Conditions

Amplification Factor.	-	-	4	-
Triode Connection ^c				
Plate Resistance.	-	-	-	6000 Ω
Transconductance.	-	-	-	9500 μmho
DC Plate Current.	-	560 ^d	-	80 mA



6KM6

DC Grid-No.2 Current.	-	31 ^d	-	2.4	mA
Cutoff DC Grid-No.1 Voltage .	-110	-	-	-42	V
Plate mA = 1					

Conditions

Heater Voltage.	6.3	6.3	6.3	6.3	V
Peak Positive-Pulse Plate Voltage ^e	6500	-	-	-	V
DC Plate Voltage.	-	60	140	140	V
DC Grid-No.3 Voltage.	30	30	0	30	V
DC Grid-No.2 Voltage.	140	140	140	140	V
DC Grid-No.1 Voltage.	-	0	-24.5	-24.5	V

MAXIMUM RATINGS, DESIGN-MAXIMUM VALUES

For operation in a 525-line, 30-frame system

DC Plate Supply Voltage	770	V
Peak Positive-Pulse Plate Voltage ^e	6500	V
Peak Negative-Pulse Plate Voltage	1500	V
DC Grid-No.3 Voltage ^f	75	V
DC Grid-No.2 (Screen-Grid) Voltage.	220	V
Peak Negative-Pulse Grid-No.1 (Control-Grid) Voltage.	330	V
Cathode Current		
Peak.	950	mA
Average	275	mA
Grid-No.2 Input	3.5	W
Plate Dissipation ^g	20	W
Envelope Temperature.	240	°C
At hottest point on bulb surface		

MAXIMUM CIRCUIT VALUES

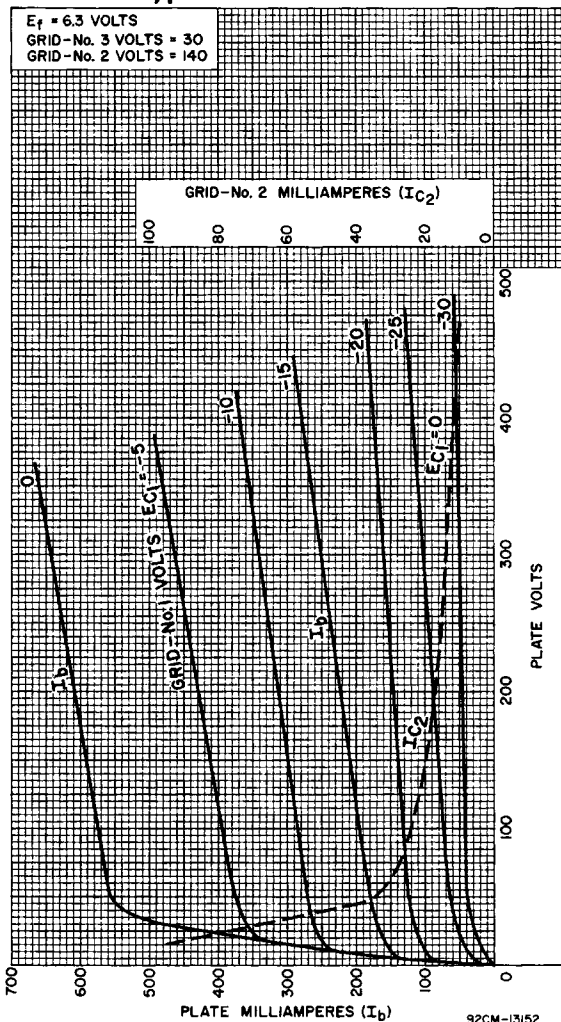
Grid-No.1-Circuit Resistance

For grid-No.1-resistor-bias operation	0.47	MΩ
For plate-pulsed operation.	10	MΩ

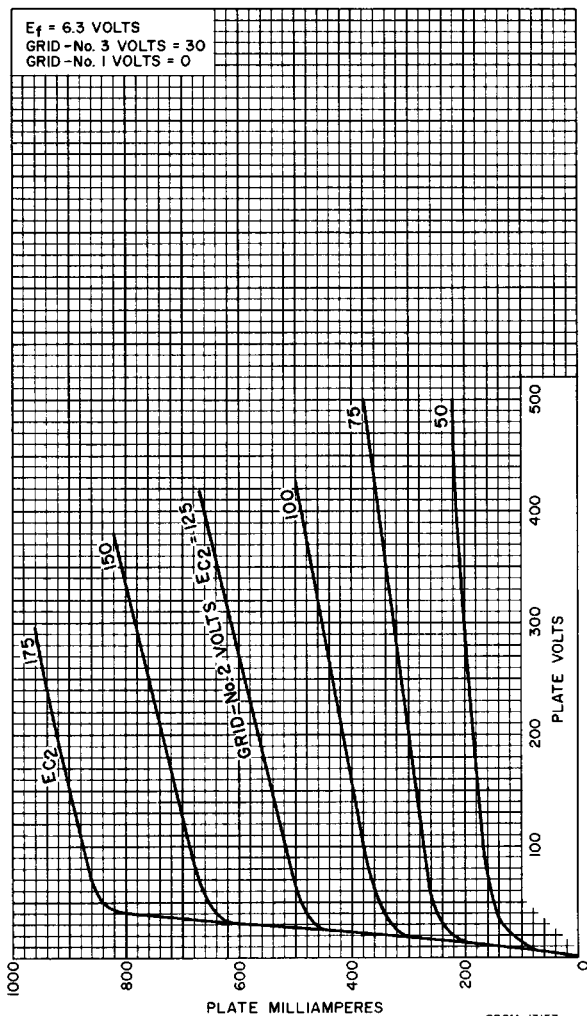
- ^a Designed to minimize secondary-electron emission from plate and eliminate "knee" discontinuities in zero-bias region.
- ^b Designed to reduce glass problems after long periods of high-voltage and elevated temperature operation.
- ^c With grid No.3 and grid No.2 connected, respectively, to cathode and plate at socket.
- ^d This value can be measured by a method involving a recurrent waveform such that the Maximum Ratings of the tube will not be exceeded.
- ^e This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.
- ^f In horizontal-deflection-amplifier service, a positive voltage may be applied to grid No.3 to reduce interference from "snivets" which may occur in both vhf and uhf television receivers. A typical operating value for this voltage is 30 volts.
- ^g An adequate bias resistor or other means is required to protect the tube in the absence of excitation.



Typical Characteristics



Typical Plate Characteristics



92CM-13153

