

6JF6

Beam Power Tube

NOVAR TYPE

*For Horizontal-Deflection-Amplifier Service
in Low-B+, Black-and-White TV Receivers*

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.)^a

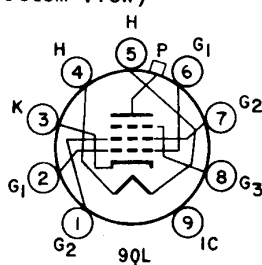
Grid No.1 to plate	1.2	pF
Input: G1 to (K, G3, G2, H)	22.0	pF
Output: P to (K, G3, G2, H)	9.0	pF

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 <i>General Section</i>
Bulb	T12
Cap	Skirted Miniature (JEDEC No.C1-2 or C1-3)
Base	Large-Button Novar 9-Pin with Exhaust Tip (JEDEC No.E9-88)

TERMINAL DIAGRAM (Bottom View)

- 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

Peak Positive-Pulse Plate Voltage ^b	6500	-	-	V
Plate Voltage	-	50	130	V
Grid No.3	Connected to cathode at socket			
Grid-No.2 Voltage	125	125	125	V
Grid-No.1 Voltage	-	0	-20	V
Plate Resistance (Approx.)	-	-	12000	Ω



6JF6

Transconductance	-	-	10000	μ mho
Plate Current	-	525 ^c	80	mA
Grid-No.2 Current		32 ^c	2.5	mA
Grid-No.1 Voltage (Approx.)	-125	-	-40	V

For plate mA = 1

Triode Amplification Factor (Triode connection: grid No.2 connected to plate at socket. Plate volts = grid-No.2 volts = 125; grid-No.1 volts = -20)

	-	-	4.1	
--	---	---	-----	--

HORIZONTAL-DEFLECTION AMPLIFIER

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 ^d	6500	V
Peak Negative-Pulse Plate Voltage	1500	V
DC Grid-No.3 Voltage ^e	100	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 ^f	17	W
Bulb Temperature	240	°C

At hottest point on bulb surface

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance

For grid-resistor-bias operation ^f	0.47	M Ω
For plate-pulsed operation	10	M Ω

(Horizontal-deflection circuits only)

^a Without external shield.

^b Under conditions shown in footnote^d.

^c This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

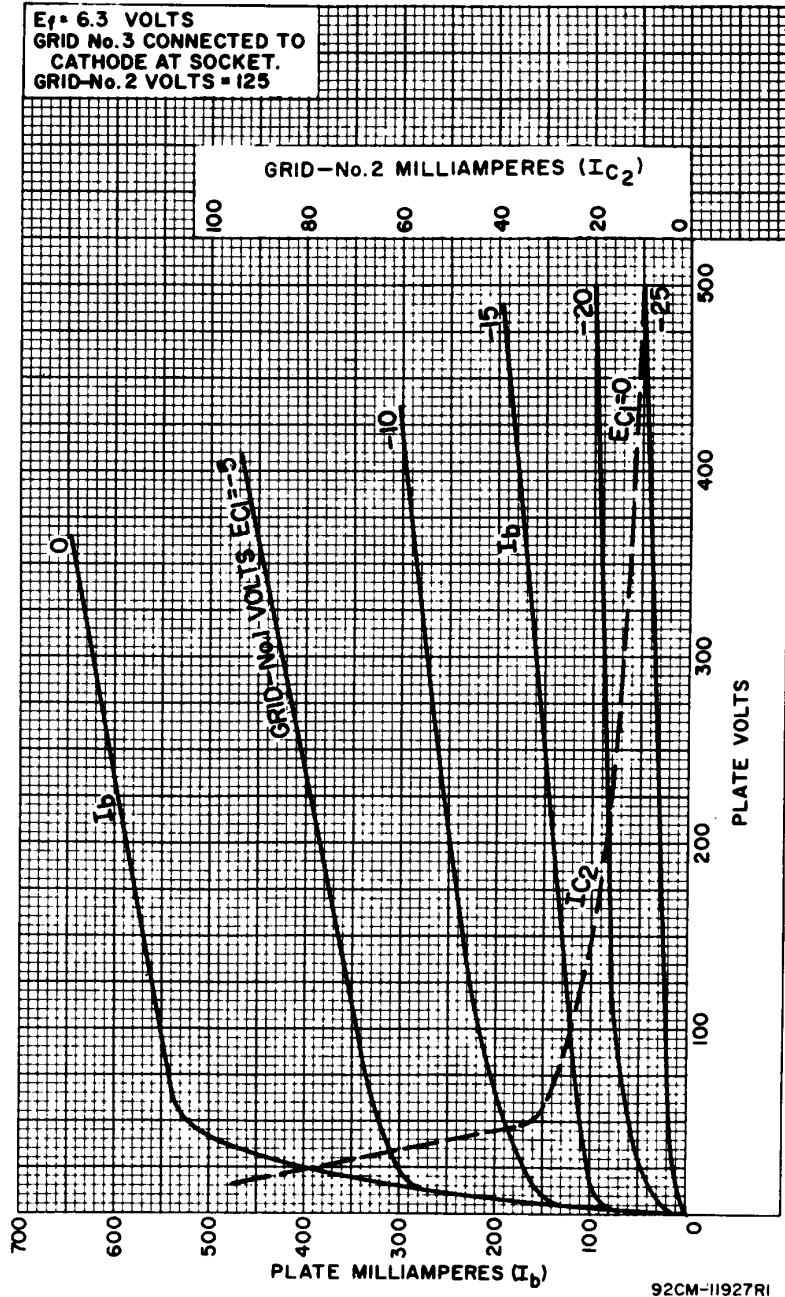
^d This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

^e 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 value for this voltage is 50 volts.

^f An adequate bias resistor or other means is required to protect the tube in the absence of excitation.

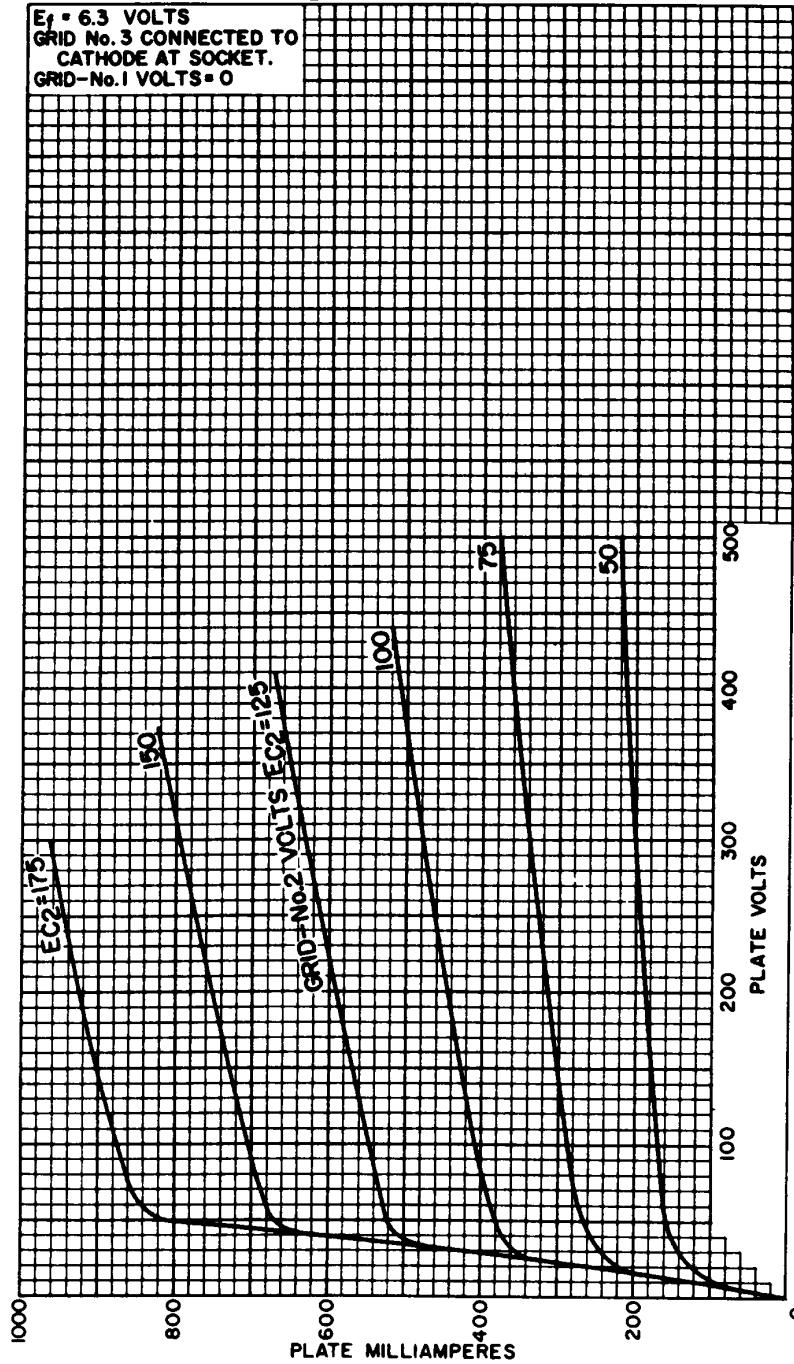


Average Characteristics



6JF6

Average Characteristics



92CM-11923R2

