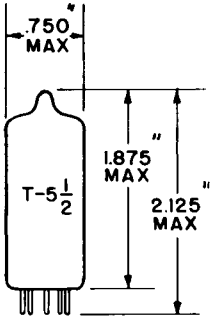
TUNG-SOL

PENTODE

MINIATURE TYPE



GLASS BULB
MINIATURE BUTTON
7 PIN BASE E7-1
OUTLINE DRAWING
JEDEC 5-2

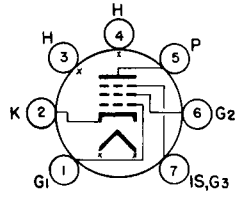
COATED UNIPOTENTIAL CATHODE

FOR

IF AND RF APPLICATIONS IN

T.V. RECEIVERS

ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 7CM

THE 6CF6 IS A SHARP CUT-OFF PENTODE ESPECIALLY DESIGNED FOR USE IN GAIN CONTROLLED VIDEO *IF* STAGES OPERATING AT FREQUENCIES IN THE ORDER OF 40 MEGACYCLES. IT IS ALSO WELL SUITED FOR USE AS AN *RF* AMPLIFIER IN *VHF* TELEVISION TUNERS. IT FEATURES CONTROLLED PLATE-CURRENT CUT-OFF AND VERY HIGH TRANSCONDUCTANCE COMBINED WITH LOW CAPACITANCE VALUES.

DIRECT INTERELECTRODE CAPACITANCES

	WITH SHIELD[A]	WITHOUT SHIELD	
GRID TO PLATE: (G1 TO P) MAX.	→ 0.015	→ 0.025	pf
INPUT: G1 TO (H+K+G2+G3+I.S.)	6.5	6.5	pf
OUTPUT: P TO (H+K+G2+G3+I.S.)	3.0	2.0	pf

[A] EXTERNAL SHIELD 316 CONNECTED TO PIN 2.

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3 VOLTS	300	MA.
HEATER SUPPLY LIMITS:			
VOLTAGE OPERATION		6.3±0.6	VOLTS
MAXIMUM HEATER CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK		→ 200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC		→ 100	VOLTS
TOTAL DC AND PEAK		→ 200	VOLTS

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

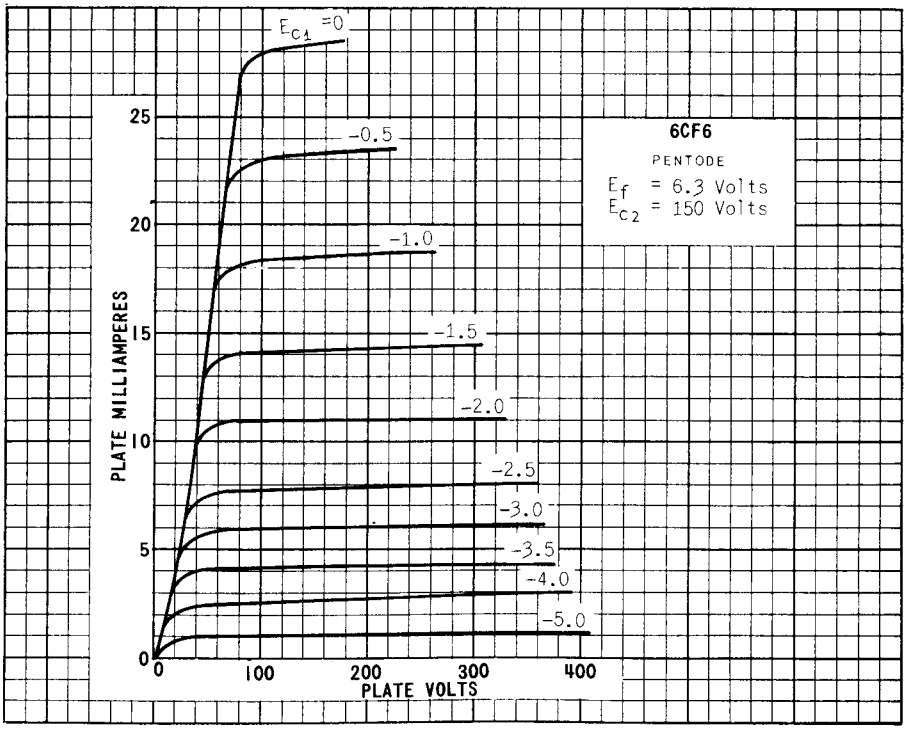
PLATE VOLTAGE	330	VOLTS
GRID #2 VOLTAGE	SEE RATING CHART	
GRID #2 SUPPLY VOLTAGE	330	VOLTS
PLATE DISSIPATION	→ 2.3	WATTS
GRID #2 DISSIPATION	0.55	WATT
POSITIVE DC GRID #1 VOLTAGE	0	VOLTS

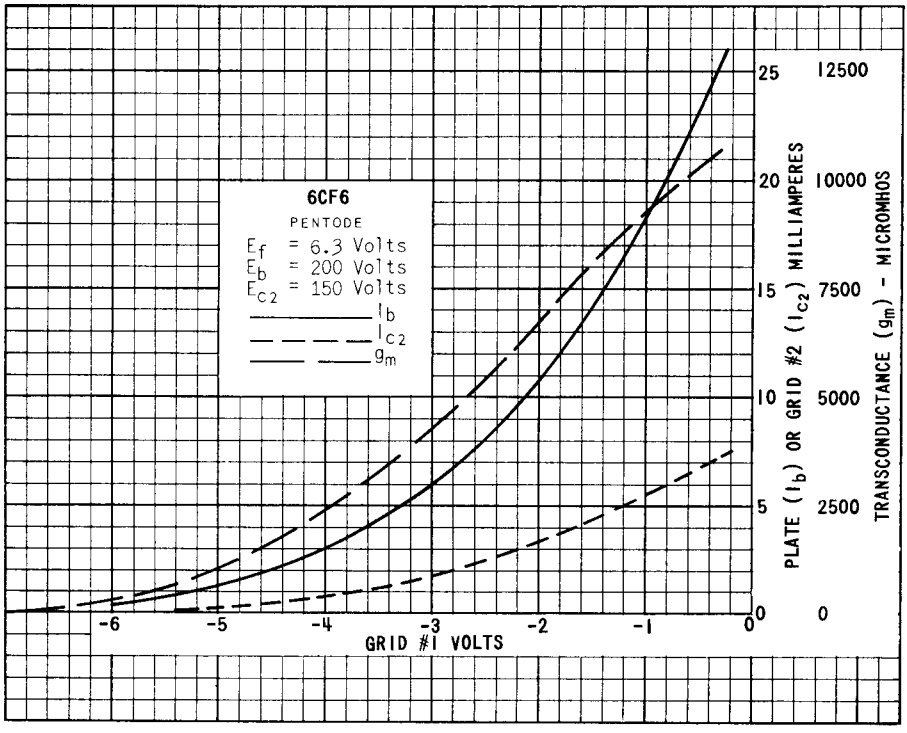
→ TYPICAL OPERATING CHARACTERISTICS

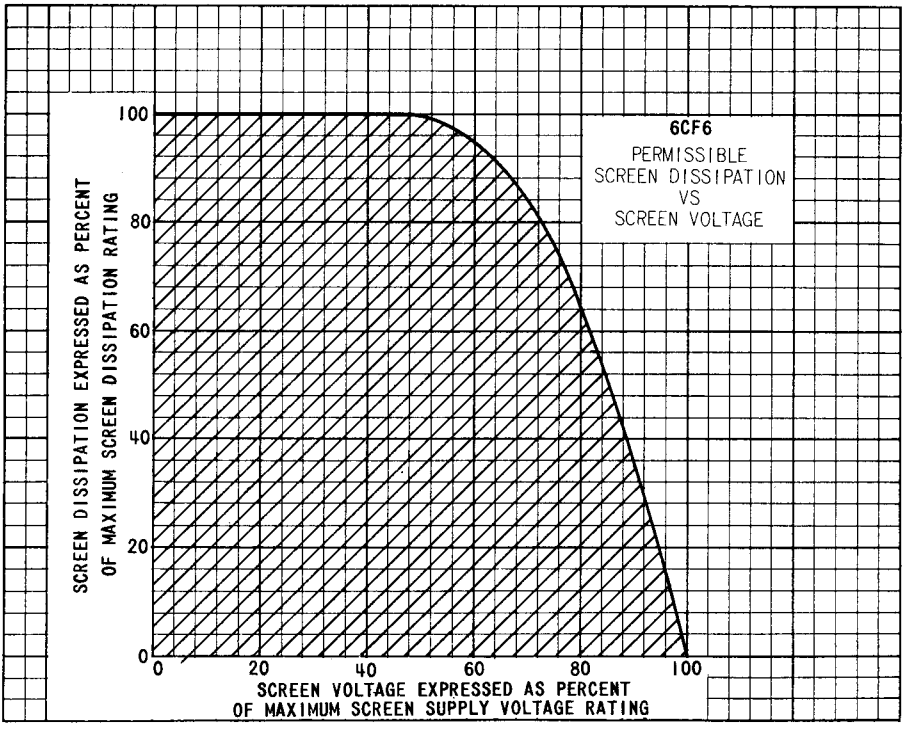
CLASS A_1 AMPLIFIER

PLATE VOLTAGE	125	VOLTS
GRID #2 VOLTAGE	125	VOLTS
GRID #3 VOLTAGE	PIN 7 CONNECTED TO PIN 2 AT SOCKET	
CATHODE BIAS RESISTOR	56	OHMS
PLATE RESISTANCE (APPROX.)	0.3	MEGOHM
TRANSCONDUCTANCE	7800	μMHOS
PLATE CURRENT	12.5	MA.
GRID #2 CURRENT	3.7	MA.
GRID #1 VOLTAGE (APPROX.) FOR I_b =20 μA	-6.0	VOLTS
PLATE CURRENT AT E_{c1}=-3V., Rk =0	2.2	MA.

→ INDICATES A CHANGE.




6CF6
PENTODE
E_f = 6.3 Volts
E_b = 200 Volts
E_{c2} = 150 Volts
I_b
I_{c2}
g_m
-6
-5
-4
-3
-2
-1
0
GRID #1 VOLTS
25
20
15
10
5
0
12500
10000
7500
5000
2500
0
PLATE (I_b) OR GRID #2 (I_{c2}) MILLIAMPERES
TRANSCONDUCTANCE (g_m) - MICROMHOS


6CF6
PERMISSIBLE
SCREEN DISSIPATION
VS
SCREEN VOLTAGE
100
80
60
40
20
0
SCREEN DISSIPATION EXPRESSED AS PERCENT
OF MAXIMUM SCREEN DISSIPATION RATING
0
20
40
60
80
100
SCREEN VOLTAGE EXPRESSED AS PERCENT
OF MAXIMUM SCREEN SUPPLY VOLTAGE RATING